DHS Faces Security. Leadership Hurdles

THE VOICE OF IT MANAGEMENT - WWW COMPUTERWORLD CO

Private-sector IT execs see diminished

cybersecurity role BY DAN VERTON This Friday marks the end of

the 30-day period in which the U.S. Department of Homeland Security hoped it would hire a leader for its cybersecurity division. But there are serious doubts about whether the DHS will be able to hire the right person this week or even in the foreseeable future.

According to the former top cybersecurity adviser to the president a high-level source in the DHS and IT industry executives, many of the most qualified candidates have been turned off by what they perceive as the administration's surprising change of heart on

cybersecurity. "The elimination of the sidential position [of cyrsecurity adviser) sent a



Had little choice but to ion Microsoft deal. spite security flaws

The fact that the U.S. Department of Homeland Security awarded Microsoft Corp. a \$90 million enterprise software deal two days after Bill Gates met with DHS Secretary Tom Ridge in Washington is more than

sheer coincidence. It's now a major security headache for a mammoth new agency that security experts say lacks the wherewithal to have considered Microsoft Deal, page 12

Latest Vulnerability rver 2003

BY ALKERNAR YEAR Users last week reacted with a mixture of concern and resignation to the discovery of a critical flaw in almost all es of Microsoft

Corp.'s Windows soft-ware, including the Wines Server 2003 operating system. The vulnerability ex-

iers in a come they bade it goodbye. Windows Flow, page 12

pha "funeral," as he called in. marked the company's transition to Hewlett-Packard Co.'s HP-UX version of Unix runnine on its Superdome server. Every user of the Tru64 Unix operating system and Alnha chins will eventually have to migrate, since HP is phas-

Even in the economic doldrums, CIOs are plan-

ing them out in favor of 140-

LIX and Intel Corn's Itanium

processor. And the company's

rivals see that as an open door.

Tru64, page 53

ning for better days. We asked a half-dozen CIOs - who are bursting with pent-up IT initiatives what their first investments will be when the economy picks up. Page 37

ehi Motor Sales CIO Tony Romero has used the kell to develop a our year IT read map "so when things get better, we're ready to pe

MIN 21 2003 - VOL 37 - NO 29 - 55/COF

Rivals of HP Court Tru64 Users

Sun and IBM eager to attract HP users being forced to Unix

Sun Microsystems Inc. last BY PATRICK THEOD week detailed a plan, called The IT staff at Best Western "HP Away," to woo HP users International Inc. last week to its Solaris-on-Spare platwheeled an Alpha server that form. Larry Singer, Sun's chief had run the venerable Tru64 Unix operating system into a conference room. Over a chicken parmigiana lunch.

terry Skaare, director of ar-Building a case will chitecture at the Phoenixrequire alternative to based hotel chain, said the Alusual ROI techniques BY JAIKUMAR YLIAYAM

Inadequate funding remains the single largest obstacle to implementing effective IT security measures at most companies, according to a recent global survey conducted by

IT Security Short on Funding

Frost & Young International And a majority of the companies surveyed said they rarely or never calculate return on investment when building a case for informa-

tion security budgets. *Return on investment appears to have fallen out of fayor as a measure of the effectiveness of information securi-

IT Security, page 53

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remand. On demand

The human body has an amazing capacity to subsit to shifting demands. So do IBM fotalScrage products The IBM fotalScrage wrusalzator Fine IBM fotalScrage wrusalzator Fine IBM fotalScrage wrusalzator IBM capacity and point it can then allocate storage to your servers helping to mycrove awaitability and utilization On demand Helping to Ibm your your capacity for its product of the product of the product of the IBM of

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Tape Disk SAN NAS Servers Software



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in the Management section: Thanks to the new

in the Management section: Thanks to the new Web site of New York's Department of Buildings, architects and engineers on longer have to wait hours in line to get crucial information to work on the cirv's 900,000 buildings. Pages 39

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- job effectively.

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- about the IT security crisis.

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ONLINE

How to Take the Offense on Identity Theft

SECURITY: Jeff Deale, director of socurity strategy at Trool Software, offers practical advice on how organizations can keep employee and customer data safe from multicloss backers. © Oathliek 30004

Inside the Hacker's Toolbox, Part 2

FOODOX, Part 2 MOBILE/WIRELESS: This week's installmen from AirDefense's Brian Moran looks at hacker tools and what they can do to your wireless LAN. @ Quicklink \$8680

Using Web Analytics WEB SITE MANAGEMENT: Find out how (and

WEB SITE MANAGEMENT: Find out how (and how not) to measure the success of your Web site investment. © Quicklink 20048

Museum's SAN Takes On a Mansmoth Task STORME: A WATE SAN at the American Museum of Natural History provides backup and data management for 32 million objects and the work of 200 scientists. © Qualitatic 30870

Wireless West Point

MOBILE/WIRELESS: Col. Donald J. Welch explains the choices West Point made as it built its high-bandwidth, high-traffic wireless LAN. © Oxfold by 30087



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Breaking Hoves
© Quintlink at 1910
Newsletter Subscription
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Knowledge Centers

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PeopleSoft Closes J.D. Edwards Deal

PropieSelt Inc. on July 18 an nounced the completion of its buyout of business applications rival J O Edwards & Co. having accounted 110 million shares or 88°c. of J.O. Edwards' stock. Separately Oracle Corp., which has made a bestile hid for People Soft, confirmed that its chief marketing officer Mark James resigned For full coverage on to OuckLink a3320 on our Web site.

Orbitz: Oracle to Rlame for Outage

Orbits LLC the surfree current travel Web site, said an outside on July 16 was related to an Oracle detahase Orbits enghassenman Carol Jouzzitis said it was the most severe outage to hit the site since it was faunched about two years ago Jouzartis said that as a result. Orbitz is no langer using Oracle's 9: Real Application Clusters database software. An Oracle spokeswoman stressed that the company worked closely with Orbut to fix the problem and that we customer data was comprovesed.

Holes Discovered In Cisco System

Security experts warned July 18 that ready-made code that exploits a recently armounced Cisco Systems Inc. Internetworking Operation System (IOS) vulnerability is circulation, and that attacks asing the exploit are taking place Cisco had warned on July 16 of a serious, widespread flaw in IOS that could make devices using the operating system vulnerable to denial-of-service attacks.

Short Takes

this week plans to announce the Coones Metrics Manager Version 2. It will ship in mid-August, priced at \$650 per shareholders voted to chance the company's name to Dell Inc.

Consolidation Projects Elevate Server Market

Demand for high-end products offers a glimmer of hope as sales stagnate

BY CATRICK THIRODS AND

Pickford, chief intra structure officer at Inc., to the high end of the with two San Ma toxastens

the rechnology subsidiary of West Palm Beach, Hay to ven Sun officials and they re

sceing strong demand for customer frond that the core pain wants to exploit Sim will curnings tentorrow. Its no. which ended March 30 was the same anatter list year

Sales Slump Worldwafe server sales have

been battered by the econommarket research firm IDC on Francisco Mas Betonia to \$49.3 billion and will remain flat this year, Duta center consolidation is helping the analysts and yendors, Despite the overall decline in server sales, revenue from these lance predominantly Univ hand servers costing between \$500,000 and \$1 million per mained flat at \$3.37 billion. It

market is for servers that cost under \$10,000 and may be used as a clustering alternative to large systems. Recentle has also been flat in that market, at transports. But IDC ages it in creasing by more than 10% this year to \$15.9 billion.

Bill Clin brook on analyst of Abordoon Copyrights on Houton, said the Ingle-end market will deteriorate as clusters esrecords these running Linux. But for some corporate I1

manages consolidating opera-Senate Votes to Kill Funds

For Antiterror Data Mining

The Senate last week voted to wirecost funding for a Pentacon data nunine program that the White House way is a critical wcopon needed for the

Note Teel Stevens (R-Alaska) introduced an amendment to the Defense Appropriations Hill on July 14 that would ettectively eliminate funding for the Terrorism Information Attain ness LEIA) program being developed by the Defense Advanced Research Protects russed the bill unanimously with the amendment intact. Sities its mornion TIA Gormerly known as the Total

Asency (DARPA). The Senate Information Assistances program) has drawn criticism from privacy rights advocates who fear it would allow an thorntes to rifle through the electronic transactions of millions of law-abiding U.S. citi-

Worldwide Server Revenue

tions, such as Andy Miller, vice provident of technical architecin Broomfield Cole, churters aren't reads. They require how so incontractions solts, incoloments" to effectively manage them Miller said "I certainly the alcuth stages can manage a cluster as one

box really isn't there yet "said Milier, who has moved part of his omerations to bush and Sun IBM's continuing faith in

the back and was demonstrate ed by the recent Lean-but sta-2990 mainframe system, ende numed E.P.o. "Customers are seeing value in consolidating to high and

products" said Michael Blus-IBAT's program director for any terms consolidation marketing IBM last week and revenue in its most recent quarter rowe to \$21 o billion, a 10% mercase over the same nerved last year While the company attributed the strong showing largely to software and services rather than hardware, it said its Intel and Univ server sales grew 23% and 20% respectively 9

VIRTUALLY DOUBLED Water systemation of their acts.

OxickLisk 39996 www.computerworld.com

but on analysis of "legally obtuned data burthermore data would first be made anonymous before intelligent software ments not humain beings, could conduct analysis, according to program documents obtained by

Computernovid The House version of the bill, passed earlier this month. imposed advance notification and authorization naming ments on the program before funding could be used to depley any part of the system. The program's fate will be determined by a joint House-Senate conference session

"From an intelligence policy resint of view, something like FIA could help to break down the arbitrary burriers to informamon-sharing that have long. agencies," said Steven Afterwood, director of the Project bederation of American Scientists in Washington, "But DARPA was slow to address the privacy concerns raised by the program. Now they are paving the price."

a mix of powernment, intelliactions, such as audine-tucket indications of potential terror-'Synthetic Data' Only

zers in an effort to uncover

the activities of suspected for

rorists. That fear stems from

the program's uncort of rely on

TIA development and testing al months at the Army's Intel-Intence and Security Command at Fort Belooir Va. Program officials at DARPA maintain that the testine process relies on synthetic data and that the final system would focus not on collection

LOW-HANGING FRUIT

Value of Project Management Offices Questioned

Study finds focus on process, not progress, means 36% of LL projects fail

hished propert management durine IT business projects. according to a recently proleased report by borrester

continue to spend too much time committee reports for enough time ensuring that

Automated Billing

Program

test and monitor every storage

device and application being

(SAN) including capacity

application that runs on the

Inc. in Purchase, NY., man-

new about 300TB of EMC

of direct attached storage

based SAN storage and 50TB

from Sun Microsystems Inc. said tim Hull, vice president of

componer network services

including IBM and Sun, are

offering different types of on

demand caracity. For instance,

MasterCard utilizes BBM's on-

demand mainframe capacity

Hull said several vendors.

EMC-provided

storage actions

Web partal.

server munitury

and automatically

ports to FMC via a

run on a storage-area network

completed three or more months late Research Inc. But many PMOs It's no surprise that the presence at a PMO dided have

mus believe on proper tolore rates "and been Baldering on analyst at Cambridge, Mass

the report How Communes Govern Their IT Spending: ed in EMC's program because a customer pays only for what it nees. They want to sell you

a new frame and fully popu late it so that you pay for it as you use it. In me that's verein model," and Hull EMC and it won't be charging any tees for standly consorts. Bill Raftery, vice president

of global financial services at FMC in Harkinson Mass. said the vendor's largest cus tomers complain that current approaches to procuring and deploying additional storage are too complex and expensay Tobus extrasporasmore than a dozen people are often needed to sign off on or-Are forms at consomer companew The process on take

involvere from six to nine months to committee and connullions of dollars EMC said OpenScale provalor sonomino Chilling for its

switch ports and storage soft ware beenses. Infol case, the Symmetrix, Clarifon and Celerra Marane arrana as well as switches and Time MORE ONLINE metry Remain Data Facility soft O Guest int 1/701

EMt. is targeting

certain type of client - seri

our consumers of statum:

Prionners and B

ware Raftery wild "home to be" of contomors who run SOTB of storage or more for the metered service

Fors Priemore, an analyst at The Enterprise Storage Group Inc. in Millord, Mass., said FMC's metering system repri sents an early service of utility computing. "I don't know that EMC's approach works for sure projects are everyone in the market, but it's an important step for a

TOM POHI MANN AND YS

is based on telephone inter respondents and their areas PMOs - enhermode or one safe at the LL department

That's up from 53% last year The problem, Polihnann and is that too man PMOs serve as "process cops and re cort compilers" for executive

what they're supposed to be donte - to make sure property Dan Garron, senior yace terms and CRO at Mohestan Sun

poer's findings, "We have a PAGE which has frequently been referred to as the PMO police," he said. The 11 department at the Uncasville, Conn-based borel

and casmo is "working hard to overcome that perception," in part by trying to enlist senior management support of PMO concepts furnish and In addition, 11 departments Lhave to be more rigid about

which prous to they're willing to take on he said. 'Is depart ments are so ingrained with the idea of home a service or ganization that to SN porto a customer is almost talson said Garrow. He advanted calling on executive manage ment 'to assist and, in many cases, say not on behalf of the IS function so they can main

with user departments." har this study harroster classified a project as a "full

[PMOs] lose sight of what they're supposed to be doing - to make running effectively.

Most companies have estaboffices (PMC)) to help them enforce standard IT processes

protects are delivered on time and within score That could explain why the **EMC** Introduces

'Metered' Storage More users will FMC's OpenScale

have access to payas-you-go model BY LUCAS MEARIAN

FMC Corp List week introduced a remote storage meterone decree that's designed to allow its biggest customers to install standby storage and network bandwidth caracity and one only for what they use EMC said its OpenScale

Automated Billing appliance is being offered as part of its financial management prourum First introduced to 1991 the OpenScale program has been limited to 50 to 100 EMC customers because its manual reporting process required tomer sites to determine how much storage was being used

With the meterine device. the OpenScale program now ware installed on-site to de-

They want to sell you a new ulate it so that you pay for it as you use it. To me, that's a great model.

JIM HULL VICE PRESIDENT MASTERCARD INTERNATIONAL

How effective would you rate your PMO(s) at improving project delivery in your organization?

19% 48%

16% 67% 1 16% 55%

14% 56%

un " it it was definench one to three months late and affected cording to survey responinmannes were delivered at least three months late, and another 17% were one to three

For his part, Pohlmann said he doesn't expect any dramoras improvements in [1] project there is improvenient that can project management methodology standpoint, because those have been around for sears," said Pohlmann, Insolved with El Actorrogents on a project's requirements

throughout its entire life exclu-Don Christian, a partner at New York-based Procewaterhouset's open, and he helieves borrester's decision to use a one-to-three-mouth project delay as part of the eriences have found that one tothree-month delays on prop-

ects might be pulatable if they end up meeting their original business benefits," he said.

PeopleSoft Closes J.D. Edwards Deal PeopleSoft Inc. on July 16 an-

ed the completion of its out of business applications ival J.D. Edwards & Co., having u J.D. Edwards & Co., navo peired 110 million shares, or %, of J.D. Edwards' stock. retely, Oracle Corp., which made a hostile hid for Poor ft, confirmed that its chief mar nting officer, Mark Jarvis, reed. For full coverage, go to

Orbitz: Oracle to Blame for Outage Orbitz LLC, the sirline-corned travel Web sits, said an outage on

July 16 was related to an Oracle detahase. Orbitz spokerwomen Carel Journaltie said it was the most severe entage to hit the site since it was launched about two years age. Jouzzitis said that as a result, Orbitz is no longer using Oracle's Si Rual Application Clusers database software. An Oracle keewoman stressed that the ny worked closely with Orbitz to fix the problem and that no mer data was compressi

Holes Discovered In Cisco System

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Short Takes

MOS INC. this week plans to see the Cognes Metrics or Version 2. It will ship in ment, priced at \$650 per AL... DELL COMPUTER COR ers voted to change the a name to Dell Inc.

AT DEADLINE | Consolidation Projects Elevate Server Market

Demand for high-end products offers a glimmer of hope as sales stagnate

BY PATRICK THIRODEAU MEN YORK

we remove controll dation path led Dale Pickford, chief infrastructure officer at Ocwen Technology Xchange Inc. to the high end of the server market. He replaced 140 servers, each of which housed 12-way processors at most. with two Sun Microsystems Inc. servers, one running 78

processors and the other nunning 107. That move allowed Ocwen. the technology subsidiary of financial services company Ocwen Financial Corp. in West Palm Beach, Fla. to centralize IT management. "Highend servers give you the means to accomplish that," said Pickford an attendee at a Sun server consolidation fo-

Sun officials said they're seeing strong demand for high-end servers, and it's a customer trend that the company wants to exploit. Sun will announce its fourth-quarter carnines tomorrow. Its revenue for the third quarter. which ended March 30, was \$2.79 billion, down 10.2% from the same quarter last wear

Sales Slump

Worldwide server sales have been battered by the economic downturn, according to market research firm IDC in Framingham, Mass. Revenue declined nearly 12% last year to \$49.3 billion and will remain flat this year. Data center consolidation is helping the sale of high-end servers, say analysts and vendors. Despite the overall decline in server sales, revenue from these large, predominantly Unixbased servers costing between \$500,000 and \$1 million re-

mained flat at \$3.37 billion It

isn't expected to change much this year. Another relationly action market is for servers that cost under \$10,000 and may be used as a clustering alternative to large systems. Revenue has also been flat in that market, at \$14.4 billion in each of the past two years. But IDC sees it in-

creasing by more than 10%. this year to \$15.9 billion. Bill Claybrook, an analyst at Aberdeen Group Inc. in Boston said the high-end market will deteriorate as clusters, especially those number Linux. become more mature

But for some corporate IT managers consolidating opera-

2001 2002 2003

Worldwide

Server Revenue

tions, such as Andy Miller, vice president of technical architecture at Corporate Express Inc. in Broomfield, Colo, clusters aren't ready. They require "too many interesting software elements" to effectively manage them, Miller said. "Certainly the idea that you can manage a cluster as nne

box really isn't there yet," said Miller, who has moved part of his operations to high-end Sun servere

IBM's continuing faith in the high end was demonstrated by the recest lounch of its 2990 mainframe system, codenamed T-Per

*Customers are seeing value in consolidating to high-end products," said Michael Bliss RM's program director for sustems consolidation marketing. IRM last week said revenue in its most recent quarter your to \$21.6 billion, a 10% increase over the same period last year While the company attributed the strong showing largely to software and services rather then bardware it said its Intel and Unix server sales grew

23% and 20%, respectively. VIOTIMELY DOUBLED Where's virtualization software will now support larger applications that need to run on two CPUs:

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but on analysis of "legally obtained" data. Furthermore. data would first be made anonymous before intelligent software agents, not buman beings, could conduct analysis according to program roriete That fear stems from documents obtained by

Computerworld The House version of the bill, passed earlier this month. imposed advance notification and authorization requirements on the program before funding could be used to deploy any part of the system. The program's fate will be determined by a joint House

Senate conference session "From an intelligence policy point of view, something like TIA could belp to break down the arbitrary barriers to information-sharing that have long existed among government asyncies," said Steven Aftergood director of the Project on Government Secrecy at the Federation of American Scientists in Washington. "But DARPA was slow to addres the privacy concerns raised by the program. Now they are

paying the price."

Senate Votes to Kill Funds For Antiterror Data Mining the activities of suspected ter-

The Senate last week voted to wipe out funding for a Pentason data mining program that the White House says is a critical weapon needed for the war on terrorism.

Sen. Ted Stevens (R-Alaska) introduced an amendment to the Defense Appropriations Bill on July 14 that would effectively eliminate funding for the Terrorism Information Awareness (TIA) program being developed by the Defense Advanced Research Projects Agency (DARPA). The Senate passed the bill unanimously with the amendment intact. Since its inception, TIA (formerly known as the Total Information Awareness pro-

gram) has drawn criticism from privacy rights advocates who fear it would allow authorities to rifle through the electronic transactions of millions of law-abiding U.S. citibases to mine electronic transactions, such as airline-ticket purchases and car rentals, for indications of potential terrorist activity. 'Synthetic Data' Only

the program's intent to rely on

a mix of government intelli-

gence and commercial data-

TIA development and testing has been under way for several months at the Army's Intelligence and Security Command at Fort Belyoir, Va. Program officials at DARPA maintain that the testing process relies on synthetic data and that the final system would focus not on collection

I DW-MANGING FRUIT

u rate your PMO(s) at

progress, means 36% of IT projects fail

BY THOMAS HOUSENAM Most companies have established project management officer (PMO) to bein them during IT/business projects, according to a recently released report by Forcester

completed three or more months late "It's no surprise that the presence of a PMO didn't have

much effect on project failure rates " said Tom Dohlmann on analyst at Cambridge, Massbased Forrester and author of the report *How Companies Govern Their IT Spending."

can IT decision-makers between late April and June zations have one or more PMOs - either inside or outside of the IT department.

president of information systems and CIO at Moheran Sun casino, agreed with the report's findings, "We have a PMO, which has frequently been referred to as the 'PMO

concepts, Garrow said.

which projects they're willing to take on he said. "TS deportments are so ingrained with the idea of being a service orcanization that to say no to a customer is almost taboo. said Garrow. He advocated calling on executive management "to assist and, in man

cares any no on behalf of the 15 function so they can maintain the customer relationship with user departments." For this study Forrester classified a project as a "fail-

P III [PMOs] lose a sight of what they're supposed to be doing - to make sure projects are

running effectively TOM DOM: MARIN ANALYST ECONOCISTIO DESEASON

Value of Project Management Offices Questioned Study finds focus on process, not fifth of all new IT projects are views with 204 North Ameri-

Research Inc. But many PMOs continue to cread too small time compiling reports for enforce standard IT processes enough time ensuring that

projects are deligered on time and within scope. That could explain why the

ed in EMC's program because a customer pays only for what it uses. "They want to sell you a new frame and fully populate it so that you pay for it as you use it To me that's a great model," said Hull, EMC said it. won't be charging any fees for standby capacity.

Bill Raftery, vice president of global financial services at EMC in Honkinton, Mass. said the vendor's largest customers complain that current approaches to procuring and deploying additional storage are too complex and expensive. To buy extra storage. more than a dozen popule and often needed to sign off on order forms at customer companies. The process can take

tect and monitor every storage anywhere from six to nine device and application being months to complete and cost run on a storage-area network (SAN), including capacity. millions of dollars EMC said OpenScale pr switch ports and storage softvides automated billing for its Symmetrix, Clarifon and Celerra storage arrays, as well as its Connectrix

application that runs on the switches and Time-

Web portal MasterCard International Inc. in Purchase, N.Y., man ages about 300TR of FMCbased SAN storage and SOTB of direct-attached storage from Sun Microsystems Inc. said Jim Hull, vice president of computer network services.

Hull said several vendors. including IBM and Sun, are offering different types of ondemand capacity. For instance, MasterCard utilizes IBM's on model. Hull said he's interest-

ware licenses. InfoLease, the

EMC-provided

storage activity

sends usage re-

server, monitors

and automatically

ports to EMC via a

nd more at me Street @ QuickLink kt/70

Finder and Symmetric Demote Data Facility software. Raftery said EMC is tareeting "hundreds" of customers who run 50TB of storage or more for the metered service.

Tony Prigmore, an analyst at The Enterprise Storage Group Inc. in Milford, Mass., said FMC's metering system represents an early version of utility computing. "I don't know that EMC's approach works for everyone in the market, but it's an important step for a certain type of client ... seri-

our consumers of storage."

Prigmore said.

whitehed been 30 The study is based on telephone inter

Sixty-seven percent of the respondents said their organi-That's up from 53% last year

The problem Pohimann said is that too many PMOs serve as "process cops and report compilers" for executive teams and often "lose sight of what they're supposed to be doing - to make sure projects are running effectively Dan Garrow, senior vice

police," be said.

The IT department at the ure" if it was delivered one to Uncasville, Conn.-based hotel three months lase and affected and casino is "working hard to at least 3,000 end users. Acovercome that perception," in cording to survey responpart by trying to enlist senior management support of PMO

dents, 19% of their application initiations were delivered or least three months late, and In addition, IT departments another 17% were one to three months overtue have to be more rigid about For his part, Pohlmson said he doesn't expect any dramatic improvements in IT project delivery rates, because of IT

management apathy. "I think there is improvement that can be achieved, but not from a project management methodology standpoint, because those have been around for years" said Pohlmann, Instead, be said, business units volved with IT departments

Tona 704 North American III decision

SOURCE FORMESPET RESEARCH NO

on a project's requirements throughout its entire life cycle. Don Christian, a partner at New York-based PricewaterhouseCoopers, said be believes Forrester's decision to use a one-to-three-month

project delay as part of the criteria is too harsh. "Our experiences have found that one-tothree-month delays on projects might be palatable if they end up meeting their original business benefits," he said.

EMC Introduces 'Metered' Storage

More users will have access to payas-you-go model

BY LUCAS MEARIAN EMC Corp. last week intro-

duced a remote storage metering device that's designed to allow its biggest customers to install standby storage and network bandwidth capacity and now only for what they use. EMC said its OpenScale

Automated Billing appliance is being offered as part of its OpenScale storage asset and financial management prostram. First introduced in 1999 the OpenScale program has been limited to 50 to 100 EMC customers because its manual reporting process required field engineers to visit customer sites to determine how much storage was being used.

With the metering device, the OpenScale program now includes a server with software installed on-site to de-

They want to sell you a new frame and fully populate it so that you nay for it as you use it. To me, that's a great model.

JOHN HOREL WICE PRESIDENT MASTERCARD INTERNATIONAL

BRIEFS

HP Storage VP Moves to FMC

tendett-Packard Co. confirme on provident of its storage sof re division, left earlier this enth to accept a position in IC Corp.'s Open Software on alongside former HP spee Mark Lewis. Lewis no EMC's chief technolo or about a year ago and now ads EMC's Open Software di-ion, Frank Harbirt, formerly vice president and general men

Sybase Broadens Support for Linux

base Inc. last week isunch New York and said it plans to port all of its software to Linux by next year. Dublin, Calif.-based Syboso already offers its Adap-tive Server Enterprise relational database and several other prod-ucts on Linux. Products yet to be ported include the Sybase IQ antical database and the Sybase sgration Suits.

Adobe Announces Form Design Tool

idobe Systems Inc. Iast week er, which will enable users to create electronic forms that process data using Adobe Acre hat software or XML Data Paci age. San Jose-based Adobs said he graphical tool, to be avail early next year, will allow com-nanies to include XML schemas

Short Takes

PEOPLESOFT INC. and AMERICA ONLINE INC. signed a deal to in-tegrate AOL's Instant Messenge software into PeopleSoft appli-cations. . . . ACCENTURE LTD. it exceeded not revenue and MARK HALL • ON THE MARK

NFWS

Elaborate Spam Defenses Complicate IT ...

infrastructure but may be the only way to weed out the tiresome. resource-robbing e-mails from smarmy marketers, tedious pornographers and former Nigerian officials seeking your bank account number since their weapons of mass destruction scams have been uncovered. That's the message from vendors who are rolling out multitiered products to defeat spammers' missives before they reach corporate desktons. One of those vendors is Webwasher AG, which next week will spin off SpamEquater Prime from its inance soom blocking with the need to eliminate false positives. "You don't want terrated Content Security Management Suite CEOs can easily see how snam to lose a key sales contract in e-mail because some software blocked it." he says. hurts a company's productivity since they too are victims, says Webwasher That's why administrators are able to employ two levels of confinement for

Vice President Frances Schlosstein. She claims that as much as half of all e-mail coming into some companies is spam, with the result being high-level exacutive storming into IT's offices and demanding immediate fixes. That makes it easier to sell spam-specific products rather than more strategic, integrated

security parkages which cost more. "Spam has the CEO's attention now." Schlosstein says, Snam-Equater Prime employs a "method mix" to rid your network of snam, including using proprietary header and body text rules to ferret out upwanted messages, she says, Bart-Ian Schumann. general manager for serpice and support at Web.

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deskton, or both. . Relieve it or not, it's been only during "the last 150 days that there's been a tremendous uptick in the volume of snam," says David Staas, director of market development at Redwood City. Calif-based Openwave Systems Inc. That snam avalanche is making Onenwaye's three-tiered approach to fighting spam with its Mx 6 prodlonger sufficient to

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Prime on a central server, the end user's

the company pointed out that it took 29 not attractive. "It's no years to advance from 108 KHz on the company's 4004 microprocessor to I GHz delete it to get rid of it." on the Peotium III, but only 18 months to jump to 2 Offices the P4. Intel's senior view Staas argues. "You need a long-term strategy because spammers innovate constantly" He points out that the life of ner's IP address is

depend on blocking offending IP sources The first tier of Mx 6's defense system. which is deployed on nowerful Unix servers on the edge of the network, eliminates most snam. Additional screening annifications on another layer of servers process the remaining messages, and deskton tools clean up the drees. Openwave is mulling using I inser as a server for an upcoming release because it can heln keen end-user costs down. The oext enum heatlesmound save Staps will be mobile devices. That's because by 2004 it will be possible to send SMS messages to floss hundhelds from a single PC. eliminating the cost of sending such messages from another mobile device. Somewhere, that's called progress. • All that spam is probably hosping loads of storage on your storage-area network, forc-ing you to reconfigure it constantly. And for most sites, that means rebooting your server. Well, that bassle is over, so long as you are using Solaris servers and Fibre Channel host bus adapters (HBA) from INI Corn in San Diego, Starting today. users of INDs Version 53 of its Solaris drivers with the company's FCX-6562 everyday tasks such as driver updates and logical unit number reconfiguration. The opgrade is free for existing users. • Intel Corp. celebrated its 35th birthday last Friday by using history to look into the future fast coming upon us. For example.

ing it almost useless to rely on tools that

president for servers, Mike Fister, a 19year veteran with the company, claims that today's server performance will lead tenfold by 2008 and have even more advanced self-management features. But will they shop snom? & analysis. The cost of a 60-day

Peer-to-Peer File-Sharing Threat Spreads BY TODO R. WEISS to allow companies to check

Unauthorized peer-to-peer file sharing on corporate networks appears to be far more widespread than many companies realize In a study of P2P file shar-

ing at 560 companies, Ottawabased AssetMetrix Research Labs found that employees at 77.1% of those companies engrand in Web-based file sharing during the past 14 mooths. Some businesses had P2P programs on as many as 58% of

their PCs, according to the study, which was released last week. About 1 in 25 employees. were found to be using the P2P applications. Aside from resource sanning and accurring issues

stemming from unauthorized downloads, corporations could find themselves legally liable for copyright infringement, legal experts said. AssetMetrix posted its P2P-Tracker analysis program on its Web site [QuickLink a3500]

their networks for unsuthorized P2P applications. It can be downloaded for free through Aug. 31. Paul Bodnoff, president asset management services

and chief operating officer of AssetMetrix, said his hosted IT business added the P2P detection service to address escalating legal liability threats. The software will identify instances of P2P clients, but companies have to pay for additional

monitoring subscription is \$5 per desktop, or \$16 per desktop for an annual contract. Some companies said that they're monitoring PZP use on their own. Phil lackman. IS manager at Ottawa-based

medical equipment supplier World Heart Corp., said most employees are prohibited from installing applications on company computers. He said his company hired Asset-Metrix a year ago to inventory its computers and software licenses, but it woo't need the additional P2P monitoring.

New Products

mons said. That hardware

orado Springs School District. who said it could help speed the process of battening down his network. The school district currently mas Unicenter systems management software and several security tools

In Bell's occupiention students like to back into the network so "the more vulnerability we can get out of the network, the less chance for

Pricing for eTrust Vulnerability Manager starts at \$25,000 per appliance plus \$2 per node per mooth. It supports systems running Win-

down Linux and Unix, and is shipping now. countries to roughly one SAN

IBM. Cisco Ink Deal With AXA for 8.000 Switch Ports

reseller of Cisco's IP storage switch

---IBM last week penned a multimillion-dollar global server and storage consolidation deal with AXA Technology Services that represents the Inreest deployment of Cisco

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on-demand computing deal that IBM and AXA signed in AXA has been consolidating servers, mainframes and storage devices in the U.S.

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Manager, which IT shops can and correct security vulnerabilities in the enterprise. The software comes bundled on what CA is calling a rackmountable Dell Computer Corp. appliance running Windows 2000 Server

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Ron Roberts, global proerom manager for server storage consolidation at AXA.

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iSCSI and FCIP protocols since August 2002 FCIP is a method for con necting two or more SANs by encapsulating Fibre Channel

frames in IP headers for transport over long distances via Prhemet. The iSCSI protocol is used to facilitate data transfees over LANs and manage storage over long distances via Ethernet.

The IP modules are now available on Cisco's MDS 9216 switches and on its 9509 and 9506 directors, which sport 224 ports and 128 ports.

CA Users Get an Earful on Sonar's **Promise of Automated Management**

Laud strategy for maximizing resources will ship in 120 days.

BY MARC L. SONOMI Soosting the automation of security and systems management was Computer Associ

ates International Inc.'s key focus at last week's CA World 2003 user conference here. The effort is built around a new architecture dubbed Somer that CA will begin to

roll out later this year. The technology aims to dynamically and securely allocate available server or storage resources to the business processes that are most important at a particular point in time.

Over the nost several years. CA has been steadily enhancing its software to help [7] shops prioritize resource allo cation. But the Sonar technolony for the first time will automate management according to predefined business rules In a keynote speech, CEO

Sanjay Kumar explained that Sonar will look for IT assets. catalog them and then decide how they will be delivered to support a particular butiness process. Sonar will be embedded in CA products rather than sold as a standelone product, according to

Pieces of Sonar technolog will start to appear early in the fourth quarter. Already in beta is the Unicenter NSM Dynamic Reconfiguration Option for VMware Software, which dynamically decides what resources are needed to meet performance requirements. Also in beta is the BrightStor Process Automation Manager, which will handle the provi signing of storage resources across multiple platforms. It

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Cisco said the deal with AXA Technology Services, the inhouse IT services arm of Parisbased financial services firm AXA Group, will result in the deployment of at least 8,000 Cisco MDS 9000 switch ports over the next six years.

Part of the Plan Scott Drummond, program di-

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HP Storage VP Moves to EMC

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resource-robbing e-mails from smarmy marketers, tedious pornographers and former Nigerian officials seeking your bank account numher since their weapons of mass destruction scams have been uncovered. That's the message from vendors who are rolling out multitiered products to defeat spammers' missives before they reach corporate desktops. One of those vendors is Webwasher AG, which next week will spin off SpamEquater Prime from its insace man blocking with the need to eliminate false positives. "You don't want terrated Content Security Management to lose a key sales contract in e-mail be-Soute CEOs con essily see how snam cause some software blocked it " he says hurts a company's productivity since That's why administrators are able to they too are victims, says Webwasher

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Pricing starts at \$50,000

employ two levels of confinement for suspect messages, with SpamEquator Prime on a central server, the end user's desiron or both a Believe it or not, it's been only during "the last 180 days that there's been a tremendous uetick in the volume of spam," says David Staas, direc-

> Calif-based Openwaye Systems Inc That snam avalanche is makine Openwaye's three-tiened approach to fighting spam with its Mx 6 product attractive. "It's no longer sufficient to delete it to get rid of it." Staas argues. "You need a long-term strategy because spammers innovate constantly." He points out that the life of a snammer's IP address is

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The technology might help address the demand to con down on the costs of idle hardware and the people needed to manage it, said Clark Ammons production and systems manager of information systems at Washington University in St. Louis.

Some of the university's servers remain idle most of the time but are needed for occasional spikes in demand. and as other students are registering for classes, Am-

New Products

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Cisco MDS 9000 switch ports

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IBM. Cisco Ink Deal With AXA for 8.000 Switch Ports

IBM is first major reseller of Cisco's IP storage switch BY LUCAS MEARIAN

IBM last week penned a multimillion-dollar global server and storage consolidation deal with AXA Technology Services that represents the largest deployment of Cisco

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ing servers, mainframes and storage devices in the U.S. France, Germany and the U.K., and it plans to deploy almost 2,000 SAN switch ports in the first year of the rollout. After the first year, another 6,000 ports will be installed in data centers in Beltween SANs for disaster recovery using the Fiber Channel gium and Australia.

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and reliability.

You don't have a UNIX-level budget.



Windows Server

Continued from pave I

Cybersecurity

message that the White House no longer cares about this isrun " raud Rushand Clarke for mer chairman of the President's Critical Infrastructure Protection Board, "They will eventually find someone who will arrow to do it arrows but they will be so hamstrung that it will take at least a year to regain the capability that we had in 2001

of Arlimeton, Vauhased Good Harbor Consulting LLC

[QuickLink 39804] A former senior administrarion official who requested anonymity said many of the candidates who possess the skills measures to do the job are senior executives in the private sector who are concerned about a lack of authority in a position that will require a significant amount of cross-agency collaboration. In -d-fition, many are wary

of what the official character ized as "an axis of exil" com prising the National Economic Council, the Office of Science and Technology Policy and the Office of Management and Budget (OMB) - seencies that have sought to redirect the administration's attention

to other priorities. A senior DHS official, who also requested anonymity, said man condidates have been identified for the position and honor anad there are satilling to accept the job. However, the nfficial said that Robert P Liecouski, assistant secretary for infrastructure protection at the DHS seems to be holding out for a high-profile executive

with impeccable qualifications The person who steps up to the challenge will likely do so and of a sense of duty and putriotism, not because of the way the DHS is managing the effort, according to a half-dozen semor IT industry executives in

terprierand for this story "For a person to take this inh they have to be comfortable with the laissez-faire approach toward IT security. which I'm not comfortable

with," said John Copeland. at Lancope Inc., an intrusiondetection excess non-fee in Alpharetta Ga

"I think I could be more of-Getive outside the government." Copeland said. "The people who are really quali fied are probably in positions where they are really accomplishing things. You're not going to find an effective security manager who's out of work and looking for a soly You have

to ention them."

The Chain of Command Maria Ctrino, co-founder and

aged security services firm in Waltham, Mass., said it would take a direct line to Homeland Defense Secretary Tom Ridge for her to consider such a pori tion. The departures of Clarke and his successor. Howard Schmidt [QuickLink 38015] were sealed when it became

were being releexted to window dressing " said Cirinn, At best, the administration's current position on cobernecurity is hypocritical and will change only

vice president of

with a catastrophy incident, she added lerry Harold, cofounder of security consultine firm who's out of NetSec Inc. in Herndon, Va., and

its government solutions group, said a lot of questions about the reporting structure would have to be answered before he would even

consider the inh "I would be four layers down from the secretary but given a mandate to handle national priorities," he said. In addition to having Congress

You're not oping to

find an effective security manager

work. You have to entice them. JOHN COPELAND

managers in industry have a responribility to create and enforce policy across the entire organization, and they work from the ton of the management chain down. And yet the covernment has them buried down in the structure where they're little more than a project manager."

overseeing his Tom Goodman, vice presiactivities. Harold dent of operations at Bluefire said the unde-Security Technologies a wire Good relationship less security company in Baltiwith the disector more said that if asked he of the OMB, who would accept the position out is responsible for of a sense of duty But he still overseeing the har concerns about the curenvernment's incirent reporting structure. dent response co. "Having the ear of the secpability could

retary would be enough," he cause additional said. "Butl it should not be a political problems dotted line. It should be a di-"There, I [would rect report, and it should be at the assistant secretary or bottom of the ordeputy secretary level." David Wray, a spokesman kind of cog." said for the DHS said appointing Harold, "Security an adviser for cybersecurity at

deputy secretary level "would be completely dysfunctional* and out of proportion for what is only one component of critical infrastructure Wray noted that the DHS has made clear its intent to integrate the management of physical security and cyber-

security 0 ernment doesn't buy open course coffuere " said Nuner "They don't buy it because they know that every backer

clear that their positions Continued from page I Microsoft Deal

alternative sources for its soft-On June 25, Gazes met with Ridge and other leaders on Capitol Hill. And on June 27. the DHS signed a contract with the company for server and desktop software for ap-

proximately 140 000 users The DHS described the contract as a critical step in the department's efforts to establish a common computing environment for its 22 formerly independent agencies. But with the discovery on

July 16 of a critical security flaw affectine nearly every version of the Windows oper

Now [the DHS] 7 is held hostage to the imperfections of Microsoft code-

BOOLD COLUMN COOKED CHIEF OF STATE PRESIDENTS COULCAL IN

ating system - including Windows Server 2003, the first product to be sold under Microsoft's so-called Trust-- some security experts are

warning that the DHS may have backed itself into a secority quaemire.

Options Were Open They had a choice, but it would have been costly and time-consuming," said Roger Cressey, former chief of stoff of the President's Critical Infragmetore Protection Board

"The real alternative was to on open-source. But for 22 majority of which use nothing but Microsoft operating spetems, to convert to another platform in an efficient and cost-effective manner would have been hard to accom

olish," said Cressey, "DHS has neither the time, the money nor the flexibility for that Now it is beld hostage to the imperfections of Microsoft code writing"

DHS CIO Steve Cooper. who's leading the massive inregration effort, didn't return Computerworld's calls seeking Microsoft spokesman Keith Hodson said no software has yet been shipped to the DHS and software cracker can under the recent contract, so

the department will receive software with the necessary patches. Hodson also said that as recently as Friday, the DHS reaffirmed its confidence in Mioppositive shiften to bountle own security problems that arise A former senior Microsoft

executive who spoke on condition of anonymity said he has "yet to find company who's come up with a definitive unbiased white paper on the pros and cons of relying on a single software vendor

tion's IT infrastructure. Rafael Nunez, a former hacker now employed as a security expert at Scientech Inc. in Gaithersburg, Md., said that although standardizing on a

single software platform makes it easier for backers to penetrate different parts of an enterprise, the DHS would have been far less secure had it deplayed open-source software. "There's a reason the gov-

study the code for exploits." 9 Continued from page I

Windows Flaw protocol that deals with mes-

sage exchange over TCP/IP. It allows attackers to take over a victim's system and install malicious code: view modify or delete data; or create new user "It is probably the most seri-

ous vulnerability that we have seen from Microsoft in the past 12 to 18 months," said Chris Rouland, director of Internet Security Systems Inc. in Atlanta

The flaw - word of which followed the announcement of another major Windows vulnerability only a week before [QuickLink 39744] - highlights the continuing challenge that users face in secur ine Microsoft software, said Scott Lorch senior informa-

Corporate Security Still Lacks Focus Two Years After 9/11

Survey finds that most companies have avoided centralized security oversight

THE THE terrorist attacks of Sept. II. 2001, many CEOs were surprised to learn just how decentralized their security management structures were. But that surprise hasn't yielded much change, according to a new

survey. The survey results, released earlier this month by Alexandria, Va-based American Society for Industrial Security International Inc. (ASIS), showed that most companies have steered away from centralized management and strategic oversight of security, instead spending more money on insurace as a

"High-level reporting and accountability are still the exception rather than the rule in corporate security manage ment," according to the survey, which polled more than 300 security and risk managers. "While one quarter of companies have a chief security officer (CSO), most of the remainder do not appear to

have much interest in creating the position." In addition, while security spending since Sept. Il has increased on average by only 4%, corporate spending for insurance premiums has jumped by 33%. One-fifth of the companies surveyed reported a doubling of insurance spend-

ing since Sept. II.

Where the Money Goes
Mary Ann Davidson, CSO
at Oracle Corm. said insurance

at Oracle Corp., said insurance without a solid organizational structure is fruitless.

*Purchasing expensive insurance for security without improving your operational drapes for a dirty house," she said. "Organizations need to clean house first through better operational security and then use insurance to mitigate the remaining risk."

But therein lies another problem, said MacDonnell Ulsch, managung director of Janus Risk Management Inc. in Marlboro, Mass. "Compunies have not yet fully grasped how to embrace enterprise

nies have not yet fully grasped how to embrace enterprise risk." said Ulsch. And while companies are earmarking additional funds for security, he said, "bigger budgets don't translate seamlessly into bee-

The real question that needs to be answered, according to Ulsch, is bow the 4% increase was spen. 'Did the right programs ger funded? Were companies thinking of risk from a bolistic vieurocitie or did they

invest in expensive point solutions guaranteed to prevent a meltdown?" he said. The CIO at a global auction company, who spoke on condition of anonymity, said that despite the increasing risks most companies face, profit margins are simply too marrow to justify many new security programs.

With respect to the organizational and oversight challenges, having a single person be responsible for security is critical, the CIO said. Companies "that do not

have a CSO lack a focal point for the true accumulation and measurement of risk and as a result do not make business decisions based on the total risk picture," he said. "As CIOs, we have to make up for that gap." >

Executives with security Executive is where the responsibilities security affice reports

tion security engineer at Raymond James Financial Inc., a financial services firm in St Petersburg, Fla. Raymond James had just

completed patching 500 Windows servers against the previous flaw and is now scrambling to protect its systems against the new vulnerability. The frequency with which such ratching is needed has

prompted the company to consider automated patching technology. Loach said. "We've had endless meetings with Microsoft about the

ings with Microsoft about the state of their security and the way these patches come out and the trouble it causes us." Loach said. "It's just what you have to live with" when dealing with Microsoft, he add-The flaw discovered last week," is the latest in a seemingly never-ending stream of issues that afflict [Microsoft] products," said Bruce Azuma, corporate director of information technologies at Wilbert Inc., a Broadview, Ill.-based company in the funeral services and industrial plastics businesses. "As a medium-size businesses user of Micropech 1

am growing more and more
WINDOWS TATE OF FLAW

concerned with Microsoft's ability to release stable, secure products."

Such flaws also raise questions about the efficacy of Microsoft's Trustworthy Computing initiative, said John Cowan, corporate IT director at Caldwell Industries Inc. a Louisville, Ky-based injection

molding manufacture:

"On a scale of 1 to 10, 1
would give [Trustworthy
Computing] a 3." Cowan said.
"I don't know what the problem is, but it doesn't look like
they have been able to look
down their software like they
said they would."
Discovers of the flaw

"cracked the bubble" around Windows Server 2003 security and will force Microsoft to redouble its efforts to find out what went wrong, said Pete Lindstrom, an analyst at The Spire Group, a consultancy in

Malvern, Pa., But it would be premature to see it as a sign of broader security problems in Windows Server 2003, he cautioned. "I would be embarrassed for anyone who iumes

rassed for anyone who jumps to that conclusion." he said. Kevin Kean, director of Microsoft's security research center, last week insisted that the company's Trustworthy Computing initiative is working, despite the fact that serious flaws keep cropping up in

Windows software

Trustworthy Computing "is a long-term vision." Kean said. "We are committed to improving [it] on an ongoing basis. When we find something that goes wrong... we try to figure out where we need to

make progress."

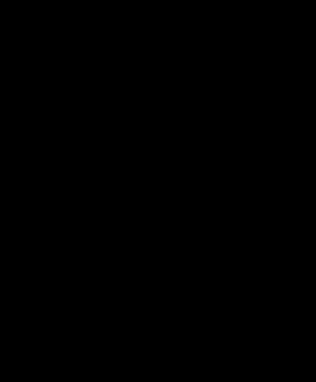
One sign that Trustworthy
Computing has begun to pny
off is the relatively low number of flaws uncovered in

Windows Server 2003 so far, compared with Windows 2000 at the same stage. Kean said. Just four security bulletins have been released for Windows Server 2003, compared with 14 for Windows 2000 in the same period, Kean said.

Some users arreed with Kean's assessment. "In fairness to them, they are dome the right things" said David Ry-Health System in Everett, Wash. "[Windows 2003] shows a complete reversal in deployment methodology compared to earlier versions, when everything was turned on and left unsecured by default. said Antony DeVoto, NT systems administrator at Volvo Finance North America Inc. in Montrale, N.I. "Finally we are seeing Trustworthy Comput-

ing making a difference that

should benefit us all " a



Corporate Security Still Lacks Focus Two Years After 9/11

Survey finds that most companies have avoided centralized security oversight

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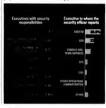
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Louisville, Ky.-based injection

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Montvale, N.I. "Finally we are seeing Trustworthy Comput ing making a difference that should benefit us all."

BRIEFS

Global IT Spending Levels Off in O2

Markhaide IT spending cont to show stability in the second number of 2003, but significant pains in corporate sper yet to happen, according to man ket research company IDC. Global IT spending is expected to sur-sess SE72 billion for the full year. an increase of 7% from last year. in the U.S., IT spending will be flat this year, with declines in overall hardware spending, large ly related to price competition ng offset by marginal growth in

FMC Dealt a Blow In Legato Deal . . .

EMC Corn.'s \$1.5 billion acres tion of Legate Systems Inc. hit a snag last week when Legate fers filed two investi ng "breach of Rductary du and self-dealing" against Legato and its board of directors. The udts came just a week after EMC agreed to buy Legato, a maker of storage management software in Mountain View, Calif

to fill gaps in its storage infracture and data managemen

. But Reports Strong Q2 Results

rth across all segments of its ness, thanks to new products on network. The I Mass., company reported of \$1.48 billion for the coended Jame 30, repre

quarter a year ago. Short Takes

ue was up 8% from last ... ORACLE CORP. grad

Amerisure Automates Policy Processing System

Uses Comprisare tools to test new multimillion-dollar insurance network

BY MATT HAMBLEN TESTING and performance management tools from Compuware Corp. are being deployed at American Incurrance Co. to help build a modern multimillion-dollar insurance policy processing system

"Some of our systems are antiquated, and we embarked on a process to redeploy them. crarting with our workers compensation insurance line of business," said Frank Petersmark, vice president of IT at Americane in Farmineton Hills Mich "But I wanted to pre-quality-test and ensure the system before production." Before the insurer began developing the Americane Policy

System (APS) lost wear "we

Vendors Vie to Boost Videoconferencing Market

Videoconferencing and collaboration technology are getting a boost from separate vendors Wave Three Software Inc. today will announce server software for desktop videoconferencing and collaboration based on the Session Initintion Protocol, Meanwhile. Tandberg, a videoconference

ing market leader in New York, last week announced new gateway hardware to allow greater flexibility in making videoconferencine connections between suppliers. partners and customers traiso sonounced support for h.264, a standard that it said will produce

superior video quali

had always struggled with finding a way to do a better mad test " he said "We absent had a disparate group of IT testing products that you had to bundle together." To develop a more holistic approach. Amerisure nurchased Companyage's Vantage

performance management and AOCenter Performance Edition testing tools, spending about \$50,000. Petersmark said. Amerisure used the products to pretest APS applications, code and network links affecting workers' compensation policies - which represent about half the comnany's business The testing with Detroitbased Compaware's tools

beloed reveal errors in data

base coding that American

ty but use half the bandwidth of current systems. Wave Three, a start-up in San Diego, has focused on attracting university customers interested in distance learning and real-time video and collaboration between academic leaders, according to the company's CEO, Robert Randall.

One beta user of Wave use existing deskrops, won't

had written showing that problems experienced by re-

mote users wereo't caused by the common natural Dates mark said. "Our experience is that the network is always blamed for slowdowns, but now we can show it isn't always the problem," he said. Americane with \$600 miltion in annual resenue and \$1.3 billion in assets, has about 700 users in 10 states all of whom nee the APS Amerisare is now using the tools to belo modernize its policy system for other lines

I have learned the value of having tools to discover a problem before there is one. FRANK PETERSMARK, VICE PRESI-

OFHT OF IT AMERICANE INSURANCE

Three's Session Conference

Server is the University of

use it for distance learning.

clinical consultations, re-

to-day administration, said

seamless" for up to 7,000

make video comm

Arkansas for Medical Sciences.

The Little Rock school might

search collaboration and day-

Mark Clark, director of techni-

cal operations. "Our goal is to

knowledge workers, he said.

dicted that be will be able to

With Wave Three, Clark pre-

have to buy in-room

video gear and may

number of lessed

lines he needs. He

for a reduction in

said he's not looking

travel costs, but be in

hoping for enhanced

Session Confer-

ence Server is swell.

able now on Win-

dows 2000 Server.

be able to reduce the

of business such as commercial auto and seperal liability insurance Petersmark said The new policy systems will cost "millions of dollars," underscoring the value of testing the products

"I have learned the value of burden south to discourse a

problem before there is one." Amerisare considers the

APS to be the heart of its business, since it involves the production of policy forms and workflow, company officials said. The Computative tools that belond build and test it are used by a half-dozen datahase administrators, network managers and developers. Amerisare bought the Com number tools after a preview of products from other major management vendors including Computer Associates International Inc., IBM's Tivoli Software and Hewlett-Packard Co. Companyage Datas a good fit with us " Determent said Amerisare still uses unrelated OpenView products from HP, but "we didn't think they were strong on testing appli

starting at \$10,500 for 10 users. according to Wave Three. Tandberg's Gateway is available now for \$21,000 for a 4Mbit/sec, sateway, but the orice will rise to \$32,000 in October. The company also announced the Tandbers Management Suite, which all lows users to schedule conferences in Microsoft Exchange

cations" he said &

and Outlook Andrew W. Davis, an analyst at Wainhouse Research in Brookline, Mass., said the new gateway product means Tandberg can sell infrastructure products as well as endocing gear such as cameras, microphones and compression-

decompression software Tandberg's Gateway will enable interoperability with other systems deployed by other users, Davis said. By contrast, Wave Three is proprietary software, meaning a user wouldn't be able to videocon ference a call to a rival ven-

dor's system b



What do you stand to gain by replacing your old PCs? A lot, for starters



HP COMPAQ d330



Small foogrand design for lanted apone acceptants. Four factor can be used as a desiring or minimum Marchael 197 Fine. Solvensed semicosobility with toolless occess. "New York," View Lobor, "View Conden". Opinional HD Town Kay (1884), whole is applied to the condense of the Princip Kill Marchael 1985.

No matter how you look oil it, you're better off replacing your origing PCs than filting them. When you could not 80 of 16 of

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SHARP

Digital Document Security and IT: Everything you need to know.

Q: What are the most significant digital copier security issues?

A Winkou copaet print controllers and permanents price multiple document fless pounding untermational descriptions of the production description of the production description of the price of the last document processed some cover man multiple documents totaling handreds of pages. Others readers principle description description of principle price of principle principle of principle of principle principle of principle

Q: How does Sharp protect the

A: The Sharp Ethernet card allows administrators to restrict access and disable unnecessary protocols With this network card, the Sharp digital copier is essentially contented the record formal.

Q: How can you be sure that security products actually perform as claimed?

A . The Common Critera program—administered by the US National Security Agency and the National Institute of Standards and Technology—evaluates security solutions, Products that are validated under the program meet security levels consistent with SO 15408 methodology.

Q: How can Sharp improve IT security?

A Sharp offers pent privacy transfer and to restrict unauthorized personnel from seeing confidential materials Copie access can be controlled and monotoned, white documents retired in princer copier/accessive/are memory will immediately cleared to eleviruse unauthorized and ross.

sharpusa.com

be sharp

There's No Killer App For Linux, Kapor Says

50 TODO R. WEI

FORTLAND ORE Mitch Kaper, co-founder of the former Lotus Development Corp, and creator of the Lotus 1-3-3 spreadsheet, is leading a project called Chandler to create an

oper-source personal information manager package [QuiekLink] 34022]. He also established the Open Source Applications Foundation in 2001 to encourage oper-source development. At the recent O'Brilly Open Source Convention here, Kapor spoke with Computer world about the effect of Elmer and neuroscure

software on business computing.

Linux is increasingly gaining respect among it professionals. What does that mean for the continued development of the

mean for the continued development of the operating system? I expect to see government and private foundations provide funding for open-source development in the future. As the overall social value of open-source becomes clearer and clearer, you will see

new kinds of funding mode

is business ready today to adopt opensource applications for critical needs? A lot depends on the perspective from which you're looking at things

Whether it's suitable for you depends on what your needs are. For many people, it's perfectly good, and for others, it's missing that critical part. There's no fundamental technological barier preventing it from [filling the remaining gops].

Do you use Linux as your primary operating system? It's not yet there day-to-day for what I do. I fiddle with it just to stay fresh. It will be nice when it's ready to do everything.

What's keeping Linux from being able to serve as your primary operating system? I have collaborative calendaring as a critical need, and I'm waiting for upcoming commector software I to make it

work acamlessly l.

When do you use Linux and open-source making the ment big push into hunteses IT? I think the penetration into big enterprises in the immediate future is going to be in the verificatis, like call centers. For knowledge workers, there's a blagbut and Linux is not ready for the big host and Linux is not ready for their machines to do specific kinds of things. The Linux decktop is sufficiently mature to take those kinds of calls well

Lotus 1-2-3 was a law to the proliferation of PCa and deleting conquiring, is there a shallar ment-have application that could spawn a mean seigration to Linux and opennoursed? There's no killer app. People need different things. That's really the task of an operating systems. It's not doing one thing right. It's doing a thousand thines right.

Yes have said that Linux on the dealing will continue to become more exemmental and could take broth the global morbet and could take broth the global morbet too-distant future. Do you taken major too-distant future. Do you taken major too-distant future. Do you taken major too dealing any country to be an explosion of Linux in the next 18 months. Ten percent of a bit-land (Windows users) is 100 million. That's not. Linux on the desktop is actually here. In

ing to me," said Pranevich.
How long the beta phase of Linux 2.6
will last is anybody's guess, but Torvalds expressed optimism that it will
be shorter than the seven months it
took to finalize Linux 2.4, which was
subject to repeated delays.

Linux vendors Red Hat Inc. and SuSE Linux AG are repearing their own Linux 26 test hernels to offer to adventureus cossomers and software vendors that may want to test the new code. SuSEs test kernels will be available around the beginning of the third quarter, according to a company spokesman. Red Hat said its version will be

SuSE expects to have an "enterpriseready" distribution based on the 2.6 kernel available by next May or June, said a company spokesman. Red Hat declined to say when it expects to ship it? 2 6 warriso.

available this month.

McMillan writes for the IDG News

MORE ONLINE For more Linux news, west our special focus page

Linus Torvalds Releases Test Version of Linux 2.6 Kernel

Beta signals developers to focus on bug testing

BY ROBERT MOMELLAN

A test version of the much-anticipated
Version 2.6 of the Linux kernel was
released last week by Linux creator

Linus Torvalds.

The release of the kernel, called
2.6test, means that kernel development
will switch focus from feature development to bug testing as the Linux community scrambles to get the final version of Linux 2.6 ready over the next

"The point of the test versions is to make more people realize that they need testing and [to] get some straggling developers realizing that it's too late to worry about the next big feature," said Torvalds in a posting to the

ture," said Torvalds in a posting to the kernel developers' mailing list. The release of the test code sends a message to software developers and Pranevich, a systems administrator at Terra Lycos SA in Barcelona, Spain, and a longtime Linux kernel watcher. "It says: We're in freeze, we're not

making any changes, and pretty much what you see, plus stability, it's what you get," he said. 'Now it's time for the people that are interested in developing (applicational to take a look at 2.6 and become acquainted with it."

The 2.6 kernel includes support from 'Deal' or Mono-Uniform Memory Architecture (NUMA) servers, which is expected to strengthen Limus's appeal as a multi-strengthen Limus's appeal as a multi-strengthen Limus's appeal as a multi-

processor operating system. It will also include support for embedded processors that don't contain memory management units, such as Motorola Inc.'s DragonBall and ColdFire processors. "The concept that you can have, out of the same source tree, some-

out of the same source tree, something that works on a [handheld device] and something that works on a 64-way NUMA machine is just amaz-



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Protect your information with the Data Security Kit from Sharp. Financial facts, personnel records, customer lists, networked copiers/printers process sensitive information every day. Unfortunately, their hard drives can also be accessed via the network, contributing to 360 billion worth of information theft every year? To protect this weak link in your

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NetScout Moves to Unify Network. **Performance Management Tools**

Rivals expected to follow suit

NerCount Systems Inc 1ser week announced two product upgrades designed to unify real-time and historical reporting of network and application performance data on large corporate networks

At the heart of the upgrades are NetScout's new Common Data Model (CDM) Adaptors, software designed to help users eather basic performance data from a range of switches and routers, said Leslie Miller product marketMass-based company The oew technology will be

offered within NetScout's nGenius Performance Manage er 20 software and nGenius Probe 6.0 fireware which is a rack-mounted device that outhers and analyzes trafficflow records from network nodes. Both upgrades will be

available by the end of this month, NetScout said. Keith Axtell, a performance analyst at Consumers Energy in lackson, Mich., has been testing Performance Manager 20 for the past month, having installed an earlier version a

tell has noticed is an enhanced ability to simultaneously run multiple windows cootaining naturalis performance data on his PC. "You did a lot of window management in the earli-

or release," he said. Consumers Energy, an elec-

tric and natural gas utility, has

to monitor 6,500 oodes in a network that spans 100 sites in Michigan. NetScout's technology has given IT staffers better tools for monitoring coopectivity to all those devices Autall said adding that the improvements have become especially critical as the utility company moves from managine mainframe systems to managing distributed systems.

Uncassille Conn shared Mohegan Sun casino, which sunports a total of 7,500 nodes. 8 000 phone lines and 6 200 slot machines that are serially manufact to the network The new version will be esnecially useful because the CDM Adaptors can bring in information from other data sources besides Remote Moni toring, said Kevin Carey, the casino's network administrator Performance Manager 2.0 has been in production use for the nest month in a small sec-

Michael Howard, an analyst at Infonetics Research Inc. in San Jose, said that NetScout is the first vendor to come out with unified technology for network and application

Howard predicted that the offering will quickly be emulated by rivals such as Concord Communications Inc. and Network Associates Inc.'s Sniffer Technologies unit.

New Products

ment of the network at the



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To me, success is a 35 minute lunch.

At a restaurant, not my desk.

Means I'm not wasting time doing the

ame data management task again and



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something about it. People are look-

ing for as much help as they can get

much help you can expect from a se-

curity agency that signs a \$90 mil-

linn contract with Microsoft - the

the same day that yendor warms of

including one deemed "critical."

three new Windows vulnerabilities.

The bigger problem is that 80%

of the nation's critical infrastructure

is privately controlled, and several

recept studies point to a significant

disconnect between business and

IT executives over security issues.

Frustration over the glacial pace of

DHS progress spawned last week's

introduction of a coalition of secur-

ity vendors, integrators and experts

So I have one for the DHS and the

vendor group: Forget about building

organizations and products for now.

Concentrate on educating CEOs no

the issue and helping IT executives

get just the basic security measures

deployed and enforced. Now that's

something we can all talk about.

that hopes to create salable prod-

ucts [QuickLink 39918]. But even

that group has no defined short-

term goals.

leading cybersecurity sinkhnle - nn

But then again, I'm not sure how

PATRICIA KEFFF

Security Disconnect

D TELL YOU, but then I'd have to kill you. OK, it wasn't quite that bad, but a recent briefing with Robert P. Liscouski, a man whose long title could choke a horse - assistant secretary of homeland security for infrastructure protection in the Information Analysis and Infrastructure Protection Directorate of the Department of Homeland Security - came up short on what I was looking for: information about of the risks such as dis-

how this all affects you The briefine was necessarily lacking in specifics about how the department does things and how it handles things because, well, you know,

But Liscouski did say the feds are looking to build a leadership team. and he specifically wants to tap someone with industry knowledge and business expertise to lead the still vaguely defined effort. (But, as it turns out there's speculation that no one wants the job in the wake

of two White House security czar resignations and a distancing of the DHS unit from the White House) I wanted to know what the DHS is doing to get the attention of corporate America, and more important, to secure its participation and cooperation in combating cyberthreats to

national and business security. Not much as it turns out. There won't be any regulations - not like what we have with privacy and the Sarbanes-Ovley Act. So there won't be any fear of losing your inb - not like there was with Y2k, Which means there isn't any pressure to divert limited funds toward addressing security issues and implement-

ing standard security practices. And that's a problem fast look at last week's tip-packed Knowledge Center report on security [Quick-Link MIGG! We due un scores of ways to batten down the data hatches. Looking it over, I thought some of these tips weren't new, and some

emotiled employees. have been written about ad nauseam. And set it all hears repeating because we don't appreciate the value of following basic safety rules fust as many drivers snub seat belts, many companies duck digital security.

It would be great if the same government department that wants businesses to report attacks and buy certified security products could show an interest in providing some incentives for activities that could full those at-

tacks in the first place. The IT camp knows we've got a problem - it's



OTHER THAN EVERTONE WHO WORKS FOR US , AND EVERTONE WHO DOESN'T WORK FOR US. WE HAVE NO ONE TO FEAR. "

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DHS Creating Opportunities

TOW THAT the Department of Homeland Security has taken up the task of coordinating security for wireless and mobile technology, it's likely we'll see an expanded market for all types of devices and existents. In addition growers, ment money will recharge R&D for mobile and wireless, which has been languishing because of flagging capital in-

vestment and a poor business climate.

For example, the department's National Communications Service (NCS) has already rolled out a wireless priority service (WPS) using commercial wendow. This nationwide system would give wireless calls made by key novernment officials princity treatment during an emergency that resulted in a congested wireless network. The WPS is connected to a mobile switch that has been

andated to breast local exchange networks when necescase This commen connectivity to the Government Emer-

gency Telecommuni cations Service. In addition, the DHS grants money to state and local

emergency planning and in June it created the National Cyber Security Division (NCSD) to sweep cyberspace for potential nasties. The NCSD is also charged with aiding national-level recovery efforts and helping to protect against cyberthreats.

Other initiatives include an effort to use the Internet and wireless for an emergency notification system in the Washington area, and the Backup Dial Tone Project designed to keep key federal buildings humming despite a terrorist attack. The NCS selected satellite technology for the first demonstration of this project; another demonstration will use Free Space Optics

technology. Wireless voice over IP is The key to the DHS's strategy is to move abrod on several fronts at the same time, something businesses can't afford to do.

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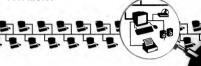
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is up only 4%, according to a Conference Board survey of more than 300 large corporations. That's hardly enough to fund large-scale infrastruc-

ture projects As a result of its experimenting with various technologies - for example. exploring the unlicensed portion of the wireless spectrum - the DHS may open new areas for commercial apolication of wireless mobile technologies. There's no estimate as to how much of the department's \$36 billion annual budget is earmarked for wireless and mobile. But with both the government and Chantilly, Va.-based research firm Input expecting federal IT spending to grow at a compound annual rate of 8 % to reach \$68 7 hillion in 2008 life certain that money is available for

wireless security projects The DHS is also incorporating lessons learned from the private sector - for example, relying more on industry standards and outsourcing up to

75% of its projects. While the department's mission is to safeguard the mobile and wireless infrastructure, in the process it is also priming the pump of the digital economy. And that's something we need as much at a security strategy.

GREG PAPADOPOULOS

The Future In Bits

LOOK AT everyday objects differently now, and you will too when you realize that bits - the binary digits of electronic data - are starting to show up in the most unexpected places.

We are now able to make sensors and radio-frequency tags so small that we can put them into anything: light bulbs, milk cartons, sprinkler systems

and building materials. Call it "bitmass" - bits increasingly intertwined with atoms to make the digital equivalent of biomass. It's going to change the texture of our world.

Consider the heat tiles on the und belly of NASA's space shuttles. I look at them and imagine bits in the tiles. The shortle could then become much more self-aware - it would notice, for example, if one of the tiles was missing. And if tragedy occurred, we could piece tother answers by asking the pieces what happened to them.

Structures could be made sware of their parameters and keep track of their own conditions over time. Imagine asking your house,

Were you hurt in vesterday's earthquake?" It sounds like science fiction has it's not We're already done the electronic materials engineering. Now we're starting to interweave small amounts of computing

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and storage into a range of materials and objects For example, razor blades will be among the first products we track as they move through the supply chain. thanks to tim radio-frequency identification (RFID) tags that now cost only a few cents to make This technology can help companies reduce "shrinkase (the term used when a product roes

Think about all the time you waste

in stores or at home just looking for things. RFID tags can respond to radio waves and say "Here I am! Put them on cartons of milk or proceedation modicines, and they'll be able to tell us much more - like whether temperature fluctustions during transit have affected their freshness or

Bitmass will also accelerate an extremely useful desien trend I call "infradestructuring," which involves separating structure and control to create a more flexible

infrastructure Take lawn sprinklers. My new house has a sprinkler system with five different controllers of different seners. tions, and I can't figure out how am of them work. So I've got all kinds of problems — this head puts out too

want to put them on different curies but I can't do that unless I tear up the ground and replumb everything. Now imprine a sprinkler head with bitmass. It might have a moisture/pH sensor probe and a network-addressable Tivalue that lets was redirect the flow of senter You serveld be able to at-

sociate any sort of watering requirement with any head. That's because bitmass enables us to teach individual items what we want from them - and reteach them when our needs chance. In other words, we'll be able to change the way things work, without having to take them apart and

Once you realize bitmass's possibilities, you will start to look at the thines around you very differently Light switches, stereo speakers, packages you send through the mail - all kinds of objects take on new properties In fact, it won't be lone before you wake up every day and smell the bits!

rebuild them

much water, that one not enough. I

H-IR and L-1 visas, and really bene-S ABUSE of the H-18 visa so ac-Linda Kilorease

An Offshore View A FTER MORE THAN 40 YEARS In IT on two continents, I find it holders are people we've trained in monic that there is growing concern SCO 'Garbage,' Oracle's Behavior in the U.S. (T industry recording offshore autonoman meant to bring into our country ex-For many years, those of us continually skilled foreign workers

working outside the U.S. have had to automate offshore in our case. if was the paragoity of purchasing operating systems, ERP and alli Jones 211 and mouthe mateu ers. We learned to live with poorly performing code and unred

able warranter I do not wish to unlarry burden al U.S. software companies with this collicion but all top often we pay far above both the value and

Protecting Jobs in a Free Market

LTHOUGH the IT clishors outthat information in their arrival re-A courcing situation causes ports. This would be similer to the angst, I am a firm believer in the information about the origins of vefree market. And I realize that we hicle parts provided by automakers. Moreover, U.S. delense contractors wound up in this meet inflowing the exceletion of IT inhor costs in the shouldn't be allowed to use off-'90s and that the U.S. (T labor force shore resources, since that results is shrinking ["Offshore's Rise is Rein increased government costs for lendess," QuickLink 39515], Howunemployment compensation. ever, companies that use of shore services should be forced to reveal IT manager, Barringson, III

cost of the graduat in real, local terror. I for one applical efforts be outsourcers and other sunniers to neckana moste on motter their lane.

tion. I challenge the complement to money other their conductivity and/or their quality to differentiate their products sufficiently for me to will only nay up to 3009h more When this happens, we will know that a functioning democratic and contailetic society et la existence In Simpson

Systems auditor. Sherwood Pork, Alberto

Measuring Service READ WITH OREAT INTEREST Thomas Hoffman's June 23 art-

cle "Outsourcers. Do They Measure Up?" [QuickLink 39030] Most interesting were the state ments made by Cethy Brune, CTO at Alletate and Brut Half were cont-

As an ex-CIO, Introngly purport Rome's contention that it incomlern service agreements, the abilty to test the anaping larriess of your deal is vetal. To Half's contention that benchmarking (penco ic spearhots of performance) is ines fair to the sandoss provider then baselining (comparisons based on the full term of the contract). I had to ask, "Whose fault is that?

Hall admits that services deals

are commonly structured to show emmediate volue to the client by beganing costs artificially low unfront Their any honorhouse comparisons performed late in the contract term will likely show the service providers to be much more costly, and accordingly, any remend once drops amount by those tests would be unlest. His an ower in effect is to do companisons after the contract period is over is that good for the provider

Of course. Is it equally good for the client? Hardy Moube the hest solution for the chant is baseline priority. With that approach, benchmarking at any point provides a much clearer picture of the actual level of vendor performance

Proce Sernes President and CEO, Bold Vision LLC Dublin, Ohio. bburnes@bold-vision.com

COMPUTERWORLD welcomes comments from its readers. Letters. will be artifed by brouty and clothy They should be addressed to James Eckle, letters editor Computerworld PO Rox 9171 500 Old Connecticut Path, Framingham, Mass. 01701. Fac (506) 879-4843 E-mail: lettersflcomputerworld.com Include an address and phone num ber for introduce verification.

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The pharmaceutical giant has installed an SAP/Cognos system to speed its financial reporting and ensure it can keep up with the competition, Page 30

orage systems have never been designed for security. SAN and NAS deployments each have their own vulnerabilities, but there are ways to protect them.



The CPU in your computer is where the real action takes place, and CPU standards would maximize computing performance, says Nicholas Petreley

I/O Moves Into The Express Lane engine his open sent intension. It is not a final final

The Shape of Things to Come? One of the more intriguing aspects of PCI

Express is the flexibility it gives manufacturers in redesigning the traditional PC box. With fewer circuits to design onto the motherboard, a TX PCI Express slot. less than 3 is, long and Newcard conne tors (which replace today's PC Card slots) aut 1.3 in, wide, vendors are experimenting with compact desidop designs that shed the traditional rectangular box shape

Hewlett-Packard's Chuck Stancil says the space-saving Newcard slots could bene more common in desidoos because they're less expensive to integrate than loview's PC Casts, which have found a

It's not just the shape of the PC that may change, manufacturers say. The tradi-tional PC itself could disaggregate into a partitioned system that places noise- and net generating components away from the user while leaving the display, keyboard, mouse and removable storage on the deskoop. We a serial technology that allows potentially split-system concepts says PCI-SIG Charman Tony Pierce.

HP recently showed a prototype, co-velenced with Microsoft Corp., called the

interconnect, but Stancil says HP is conng similar types of designs based on PCI Express. And HP isn't the only vendo willing to experiment. "It's correcting

Outlook: PCI Express stands ready to remedy PCI bus bottlenecks. but for most users. those don't exist yet. By Robert L. Mitchell

S PC MICROPROCESSORS DOSS the 3-GHz clock-speed mark and Gigabit Ethernet begins its move onto the corporate desktop, it's easy to forget that the typical expansion bus in desktons sold today still runs on 13-year-old

The 32-bit, 33-MHz Peripheral Com ment Interconnect (PCI) bus specifi-

cation, which debuted in 1992, remains the standard PCI supports an TECHNOLOGIES width of just aggregate band-132MB/eec (IGbit/sec.), and that handwidth mus

be shared among all devices on its multidrop bus. "I/O has moved at an anemic pace," says Tom Bradicich. chief technology officer for IBM's xSeries server lin

An emerging I/O standard, PCI Exress, is about to speed things up. The current specification, supported by the PCI-SIG vendor consortium and prosted heavily by Intel Corp., succeeds PCI's parallel bus design with a higheed, point to point serial interconnect mology that Intel and others say

will be both faster and more reliable. It will deliver an aggregate bandwidth ranging from SGhir/sec. (SOOMB/sec.) to 160Gbit/sec. (16GB/sec.). And because it's serial, the technology will work more efficiently with other emerging high-speed serial technolo eies such as Serial ATA and InfiniBand chin set (see diagram on page 26). But PCI-SIG isn't just promoting

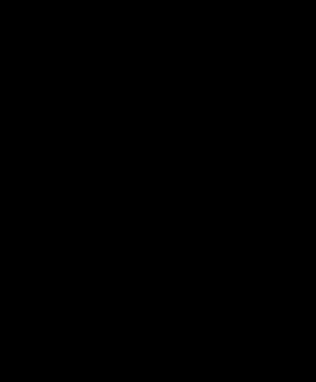
PCI Express as a deskton PCI expansion bus replacement. The consortium is positioning it as a general-purpose I/O technology for desktons, worksta tions and servers that will also speed internal chip-to-chip and graphics adapters. Intel plans to release a PCI Express chip set for servers, codenamed Lindenburst, early pext year with a PC chin set to quickly follow

On the desktop, the first PCI Express add-in devices are likely to be graphics chins because the Accelerated Granbfor Bost (ACP) standard has non out of gas, says Jim Pappus, director of technology initiatives for Intel's enterprise platform group, "All new graphics development [beyond AGP 8X] is being done on PCI Express," he says, noting that the first graphics products could be available by early next year.

Although vendors generally view a migration to serial I/O technology as inevitable, PCI Express' near-term prospects beyond high-end graphics are less clear. IT managers say desktops don't yet need the extra L/O bandwidth. "People are not taxing the equipment they have," says Scott Newton, director of IT at Otis Sounkmeyer Inc in San Leondro, Calif.

PCI Express also represents a fun-mental technology shift in that its physical interfaces, which include desktop expansion slots, a new PC Card format (code-named Newcard) and Mini PCI Express slots, won't accept existing PCI devices.

In the server world, where I/O hand Continued on page 26



TECHNOLOGY

CASE STUDY Boehringer Cures Slow Reporting

The pharmaceutical giant has installed an SAP/Cornot system to speed its financial reporting and ensure it can keep up with the competition Page 30

designed for security, SAN and NAS deployments each have their own voluerabilities, but there are ways to protect them Page 31



Another Front in the The CPU in your computer is where

the real action takes place, and CPU standards would maximize computing performance says Nicholas Petreley

I/O Moves Into The Express Lane

The Shape of Things to Come?

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speed serial technology, USB 2.0, as the interconnect, but Stanol says HP is conodering similar types of designs based on PCI Express. And HP sn't the only vendor when to experiment. It's something we're going to play with," says Brian Zucker, technology evangelist at Dell.

Outlook: PCI Express stands ready to remedy PCI bus bottlenecks. but for most users. those don't exist vet. By Robert L. Mitchell

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will be both faster and more reliable. It will deliver an appregate bandwidth ranging from SGbit/sec. (\$00MR/sec.) to 160Gbit/sec. (16GB/sec.). And because it's serial the technology will work more efficiently with other emerging high-speed serial technole gies such as Serial ATA and InfiniBand. It will also offer hot-plug and bot-swap support and enable direct peer-to-peer communication between attached devices without involving the processor chin set (see diagram on page 26). But PCI-SIG isn't just promoting PCI Everess as a deskton PCI events. sion bus replacement. The consortium is positioning it as a general-purpose LO technology for desistons workstotions and servers that will also speed internal chin-to-chin and graphics adapters. Intel plans to release a PCI Express chip set for servers, codenamed Lindenburst, early next year,

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Continued on page 26





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III TECH SPECS

PCI Bandwidth By the Numbers

servicement in the other countries for PCI Express and

signers describe bangwidth in bytes per second. And even numbers aren't directly comparable because the ways in & PCI Famess design transmis data quer a set of two week at a hace consulant rate of 2 fight too: - but only in

consists of four wires, for an appregate bandwidth of

#Gn t car. #Jmn viti PIDEX 2.0 ands townwith his increasng the clock speed to double data rate (DDR) or must data one IDDR I system designess increase the battdwidth of a PCI Express slot by adding lanes. The range starts with a 2.5 5Gbc sec one lane or 1X (pronounced "lanes one")

in higher LID handwidth recognitions. Buttlepecks could be corepounded for storage and networking used. On the desktop, graphics technologies with dth requirements beyond the capacity of AGP \$3 will one PCI Expense.

operation all the way up to an 8/16/Ght/sec. 3/X design.

Initially ripolation owners are synerted to range from TX to 4X servers will likely sample from 4X to 8X and graphics will run off 16X slots

So while POI X 2 0 supports up to 26B/sec, of traffic in

either direction, a 4X Eupress siel supports 2GB, bui onli 1GB/sec. in one direction. If the nature of the I/O is unid rectional - say read-only access to a sensi-introduct struare array - then a comparable PO Express device would need to be RY

width is more of an issue. PCTExpress tuces competition from enhanced verstore of the PCI bus standard, including the emerging 2GB sec. PCFA 201 due out later this year. But yendors are split on whether to stay on the PCI-X road for backward compatibility or you

"We are focused on PCFX 20 in the 2004-2005 time frame It onwides improvements in performance and backward compatibility for investment protection "says Day of Heises, manuser of advanced technology at Hewlett-Pack-

and the TBM's Bradiciels agrees that the current PC Especification (does not comprehend the requirements for servers in the enterprise But limms Pike director of server architecture at Dell Computer Corp.

says his company plans to pass on PCI-X 20 "Everybody is already admirting that there is some reisonable short life to the stuff they're putting on PCLX 2.0 Your investment is better protect

The issue may be decided by chip-set makers since the use of PCT Express internally makes deploying the technol-

PCI Express, designed

one for external I O devices easier. Whoever is providing the chip sets will determine whether PCI Expresswill appear in systems," predicts Bradieach. Intel dominates the desktop mar-Let Santa Clara Calif-based Server-Works Inc. has the lion's share of the server market, and it plans to focus on PCTeX 20 chip sets, sass Virkam Karvat. director of marketing at the Broadours Corp subsidiary. He doesn't exno the see PC1 Express in servers and 2005, which is when Bradicich says IBM plans to include it in the «Series line. Even then, PCI isn't likely to go away

anytime soon, which means IT will be managing set another 1 Ountertace. Motherboard of Invention

While servers have adopted faster yersions of PCL most desktop vendors have stayed with the original standard because, outside of graphics, desktops

Once users need the bandwidth, PCI Express could take off because Intel's dominance in PC chip sets gives it the power to push PCI Express into the majority of desktops, says Bert McComas, an analyst at InQuest Market Research in Higley, Ariz, "Since it's on the motherboard, [vendors will] wire it up to a slot or two or three," he says. Chuck Stancil, a technical staff mem ber in HF's personal systems aroun agrees that desktops will eventually go to PCI Express. The question is when

PCI Eveness will gain a footbold in

2004 by replacing the AGP graphics slot, enabling faster high-end graphics and streaming video applications on desktops. But its use for general-purpose I/O could be much further out Nothin Brookwood, on analyst at Insight(+) in Saratoga, Calif., predicts that other high-performance I/O applications will come once systems are equipped to take advantage of them And one application is already here. "Guidhet Ethernet really can suprate a desktop PCI bus. To get around that, condors are doing all sorts of funns, adhor solutions," Brookwood says Tony Pierce, chairman of PCI-SIG says he expects Gigabat Ethernet will become standard in desktop systems.

give PCT Express some momentum The technology will likely phase in slowly, though, "There isn't a compelling reason to ditch PCI slots, which are dirt cheap," and replace them with PCI Express, says Stancil. And though vendors say PC1 Express ultimately will be less expensive to deploy, the need to support both PCI and PCI Express means that early hybrid machines are likely to be more costly. Without a compelling need, the complexity, compatibility and cost issues could leave many organizations on the sidelines.

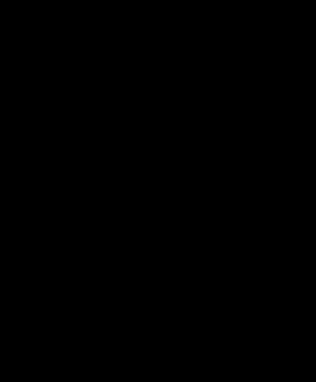
within 12 to 18 months, which could

WHITHER INFINIBAND? The technology may have found its more

QuickLink 39824



PCI Express



III TECH SPECS

PCI Bandwidth By the Numbers

bers comparing throughput numbers for PCI Express and PCI-X may find the experience confusing. That's because the nature of the two architectures makes apples to apples

isons more difficult Since Express is a serial technology, designers land to sescribe bandweith in bits per second. In contrast, PCI deers describe bundwidth in bytes per second. And even after calculating the bit/byte conversions, the bandwidth numbers aren't directly comparable because the ways in which the two technologies transport data are different. A PC1 Eveness design transmits data over a set of two wres at a base signaling rate of 2.56bit/sec. - but miv in one direction. A complete Indi-Audier PCI Extress Tank

consists of four wires, for an aggregate bandwidth of 5Gbt/sec. Although PCI-X 2.0 adds bandwidth by increasion the clock speed to double data rate (DOR) or good data rate (QDR), system designers increase the bandwidth of a PCI Express slot by adding lanes. The range starts with a 2.5/5@ht/sec. one-lane or IX (onencunced Times one")

connection all the way up to an 8/16Gbbl/sec. 32X design. Initially, desiston expansion slots are expected to range from EX to 4X servers will likely range from 4X to 8X and

graphics will run off 16X slots So while PCI-X 2.0 supports up to 268/sec. of traffic in

either direction, a 4X Express slot supports 268, but only 16B/sec, in one direction. If the nature of the VO is unidrectional - say read-only access to a serial-attached stor age array - then a comparable PCI Express device would need to be 8Y

Continued from page 23

faces competition from enhanced versions of the PCI bus standard, including the emerging, 2GB/sec. PCI-X 2.0. due out later this year. But yendors are solit on whether to stay on the PCI-X road for backward compatibility or go directly to PCI Express.

"We are focused on PCI-X 2.0 in the

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2004-2005 time frame. It provides improvements in performance and backward compatibility for investment protection," says David Heisey, manager of advanced technology at Hewlett-Pack-

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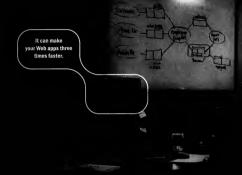
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Boehringer Cures Slow Reporting

A pharmaceutical giant turns to an SAP/Cognos system to speed financials. By Marc L. Songini



OFHERMORE MORLHERM CHIRALIS & PRINTE CORT namy with \$76 billion an revenue and 32,000 employees in 60 nations. But the Intelligim, Germany-based pharmaceutical maker was Web-mabled reporting and financial applications are making the company as nimble as some of its smaller competitors when it comes to

running financials. Like many large corporations. Boehringer is turning to Web-based financial and analytical tools to rapidly consolidate and present key financial data on a daily, weekly or monthly basis. The company uses a Web-enabled version of SAP AG's financial software. which allows it to drill down and draw conclusions based on the latest available financial and opera-

"I want to be rold where I stand and where we are heading," says Boehringer's chief financial officer. Holger Huels, "I like to [be able to] see pegative trends and counter them as fast as nossible More important. Boehringer is now able to close its books for most of its divisions just two hours after the close of business at the end of each month, and the technology is capable of providing a daily close as well says Hoeks

That's a big change for Boehringer's accounting department, which previously had to wait for printed reports and then pick through them manually. The staff used a variety of applications for financial analysis, including several different versions of SSA Global Technologies Inc.'s BPCS analytical software, says Tony Ciancio, Boehringer's director of accounting. The closing process spanned three days each month, including the time required to reconcile data from the disparate systems.

Ciancio says that with three and a half years worth of SAP data, his department can spot product sales trends and track expenses such as personnel costs. which are frequently reviewed and compared with net sales and other metrics.

The pharmaceutical company went live on the SAP Financials SAP R/3 system a little more than a

How Boehringer Gets Its Numbers



war ago, after a 14-mooth rollout. Delivering the necessary information from Boehringer's various trans actional applications required some integration work between a hospital contract and rebuse system lisoftware from Ariba Inc. that ties into SAP Bochringer also had to write custom interfaces to link its SAP system to its Manugistics Inc. production and planning application, which required writ-

ing custom interfaces inchouse Addressing Key Challenges

The system uses Cognos Inc.'s Impromptu tool to report financial results from an Oracle data warehouse. which takes feeds from the SAP system each night, says Ciancio. Impromptu then creates standard income statements, cost center reporting and accountlevel analysis. It also lets the accounting staff drill

down to individual tensoractions The biggest difficulty wasn't integration, however: it was training staff to deal with the unione way the SAP application deals with pharmaceutical-specific accounting procedures as it reports revenue, says Ciancio. To address that problem, the company de-

veloped job-based SAP training courses taught by employees who were considered power users "Each employee was assigned a series of training courses that were based upon the job roles that are associated with their particular jobs. These courses are constantly being updated to reflect new trans-

actions or processes," says Ciancio. Despite the amount of time required for training the system has made the accounting department much more productive, in part because the staff can now run un-to-date reports whenever needed, ac-

confine to Ciancia Bochringer also uses Ottawa-based Cognos' Power-Play analysis tool, which permits multidimensional views of profit-and-loss data. "We can quickly analyze revenue and expense information by switching the columnar and row data, and also bring in differ ent dimensions or measures such as budget, prior

year, drill-down and subsets of the data," Ciancio says Executives can access this data through Cornos Upfront, which securely delivers the reports via a browser over a WAN. The system also allows for ad bor analyses. The most common of these are transaction reviews that let users out fast summaries

by customer account or product. Clancia says the new system is running as efficiently as possible, but it has limitations. For instance, there is still a one-day lag in reporting because some parts of the global organization are still

using disparate systems Bochringer usually closes the books for four of its divisions in 12 hours, typically on the first business day of the mooth, Ciancio explains. However, three units aren't on SAP and don't use its general ledger. So those units have to close independently, and then the financial data is consolidated through Excel spreadsheets into Cognos Finance for reporting

which requires manual intervention and takes "For many reports, this is acceptable. For others, we are challenged in evaluating options for getting real-time updates and reporting up to the minute to the Web " Ciancia says

In addition, because not all the U.S. affiliates an on SAP it's impossible to report on some of the lower-level data. Transactional data is available when needed from the noo-SAP systems by downloading or doing queries and pulling it into an Oracle data warehouse or Excel for presentation in reports. "It is not fully automated, but it can be done." Ciancio says. Currently, he's evaluating interfacing financial data from the other Boehringer affiliates into the Cognos financials consolidation software. However, there are significant challenges because of the disporate pen-

eral-ledger systems and reporting structures But Boehringer plans to roll out the SAP system to most of its subsidiaries worldwide over the next few years, says Ciancio. Despite continuing struggles, the company is convinced that the savines from the SAP system have already exceeded expectations, he says.



PLUGGING

SAN and NAS systems have security problems. Here's how to fix them. By Lucas Mearian

decisioned with security in mind. They started out as direct-attached, so if the host was secure the storage was too. That's all changed. Fibre Channel storage networks often have multiple switches and IP gateways, allowing access from a myriad of points. Compound this with poor work by systems administrators, new data security laws and recent high-profile cases of consumer information theft. and the need for improved storage security becomes urgent.

But if systems administrators can't follow the basic steps of network storare security, better tools may not help. That's part of the reason why encryption is becoming the most widely adopted solution to the problem. Misconfiguring logical unit number

TORAGE SYSTEMS weren't + (LUN) zones and not maintaining network-access lists are two major causes of unauthorized access to storage networks, says Nancy Marrone, an analyst

at The Enterprise Storage Group Inc. in Milford, Mass. Another common mistake administrators make is not bothering to change the device default password, according to Dennis Martin, an analyst at Evaluator Group Inc. in Greenwood Village, Colo Beyond the buman failings, Fibre Channel itself isn't a secure protocol.

Through it, application servers can see (SAN). Switch zonine and LUN masking on a storage array can restrict access to devices on a SAN. Zoning segregates a network node either by hard wiring at the switch port or by creating access lists around device world wide names (WWN). Masking hides devices

on a SAN from application servers exther through software code residing on each device or through intelligent storage controllers that permit only cerrain LUNs to be seen by a host's oner-

According to Marrone, managing access through LLIN masking works on smaller SANs but becomes cumbersome on large SANs because of the extensive configuration and maintenance.

Encryption Makes Gains Given these buman errors and technol-

ogy shortfalls, some users are turning

Michelle Butler, technical program manuser for the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign manages three SANs two with 60TB of capacity and one with 40TB. For her, security means that data needs to be encrypted, both when it's in transit and stored on a disk

"There are some tools out there but there are also some big gaping holes being left that so far don't seem that interesting to backers," Butler says. Nevertheless, the NCSA plans to buy Brocade Communications Systems Inc 's newty released Secure Fahru operating system and Fabric Manager software. Butler says the products will allow her storage administrators to create petwork management accesscontrol lists using public-key infrastructure (PKI) technology and device access-control lists based on WWN

The coftwee sho offer suthentication and encryption for control information or management data on SAN devices Examples of the necessity of encrypion shound For instance in Issuary a disk drive with 176,000 insurance policies was stolen from Guelph, Ontariobased Co-operators Life Insurance Co.

In response to events like this, California adopted a new law SB 1386. which went into effect this month requires any company that stores informarion about California residents to publicly divulge any breach of security affecting that data within 48 hours. In addition, Sen. Dianne Feinstein's (D-Calif.) office is finalizing a federal version of the bill - called the Data-

base Security Breach Notification Act - that would provide similar protections to all U.S. residents. The only companies exempt from the California law and the proposed national legislation are those that encrypt data at rest. Several newly released products address concerns posed by the recent legislation. In April. Mississaura, Ontario-



hased Kaszen Chase Applied Research Ltd. announced its Assurency Secure Networked Storage platform, agentbased software that provides a strippeddown PKI-based authentication and encryption for networked storage devices. The company estimates that a complete encryption system is generally 7th to 10th of the cost of a SAN

Other Vendors

Another company getting noticed is start-up appliance vendor Decru Inc in Redwood City, Calif., which uses proprietary software to encrypt data on the storage organ but uses the IDee protocol on the application server to encrypt data while in transit. Its Data-Fort security appliances work for for both SANs and network-attached

Vormetric Inc. in Santa Clara, Calif. sells an appliance that encrypts data at the file level for NAS, file servers and tape archival systems but not at the block level for SANs. And NeoScale Systems Inc. in Milpitas, Calif., sells a product called CryptoStor FC, that provides wire-speed, policy-based encryption for SAN and NAS data. Although most currently available

storage security technologies offer encryption analysts say it's important for users to make sure that the data is encrypted both at rest and while being transmitted across networks.

Storage security etandards are on the way

O GuickLink 30721





UGGING

SAN and NAS systems have security problems. Here's how to fix them. By Lucas Mearian

TORACE SYSTEMS WEREN'T designed with security in mind. They started out as direct-attached, so if the host was secure, the

storage was too. That's all changed Fibre Channel storage networks often have multiple switches and IP gateways, allowing access from a myriad of points. Compound this with poor work by systems administrators, new data security laws and recent high-profile cases of consumer information theft. and the need for improved storage se-

curity becomes unvent-But if systems administrators can't

follow the basic steps of network storsee security, better tools may not help. That's part of the reason why encryption is becoming the most widely adopted solution to the problem Misconfiguring logical unit number (11:N) zones and not majoraining network access lists are two major causes of unauthorized access to storage networks, says Nancy Marrone an analyst at The Enterprise Storage Group Inc. in Milford, Mass, Another common

bothering to change the device default password, according to Dennis Martin, an analyst at Evaluator Group Inc. in Greenwood Village, Colo. Beyond the human failings, Fibre

Channel itself isn't a secure protocol. Through it, application servers can see every device on a storage-area network (SAN). Switch zoning and LUN masking on a storage array can restrict access to devices on a SAN. Zoning segregates a network mode either by hand wiring at the switch port or by creating access lists around device world wide names (WWN). Masking hides devices

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HELP IS COMING Storage security standards are on the way

TV for the 21st Century

PRS is leading the industry into a brave new world of IT. By Gary H. Anthes

chain automation con cents from the manu facturing world Public Broadcasting Service is reinvesting the way it manages and distributes television programs. The overhaul, expected to be completed by 2006, will

fundamentally change the dynamics and economics of TV broadcasting, PBS says. Today, PBS distributes programs to its 177 member stations as post time video.

streams from satellites. A single show may be sent a dozen times depending on the time zone, scheduline and weather

conditions. Many of these transmissions require some one at the station to be standing by to "catch" the transmission to videotape or on a

ulden comme

Indeed, the entire programming supply chain - from the content producer to PBS to local stations - is punctuated by laborious exacting and error-prone manual proorderes. And it requires punishingly expensive and specialized broadcast equipment. Every station has "master control* equipment that can cost

more than \$10 million. But PBS aims to replace the pricey gear with Intel-based computers; the real-time video feeds with store-and-forward, IP-based file transmissions; the physical handling of tapes with drag-and-drop mouse movements; and the labor-intensive quality control with software. Andre Mendes, chief tech-

nology integration officer at PBS in Alexandria, Va., says the new technology will improve broadcast reliability and quality and enable new broadcast services It will save PRC and its member stations more than \$100 million annually, and it will allow the survival of some stations now on the brink of bankruptey he says

Progress at PBS PBS technicians may no through a videotaped show several times - once to check for quality, again to insert

V-chip information, again to add branding and logos, then seain to add closed captioning or Spanish audio, and so on. As each step, they do a technical evaluation of the entire tane. so a one-hour show might involve several bours of checks. These multiple steps are required because PBS often gets show content in several pieces from the producer and in a variety of formats

Hoder the new scheme DBS will either set all the content at once, as a data file transmit ted ower IP or it will get the individual components accompanied by metadata that describe them and explain how they are to be combined. PBS technicians will then no

duce the final show in one sten "What used to take six hours will now take one hour or less because we can do it faster than real time." Mendes says. At the end of this single technical evaluation, the TV show will exist as ordinary digital data, subject to storage

oo commodity computer storane systems and transmission as discrete files over IP-based networks, either terrestrial or satellite-based, Currently, a tape has to be pulled from storage, cached onto a video server, manually scheduled and then streamed in real time

via satellite and caught on the station side each and every time a station wants is "Now it will be dragged and dropped into a schedule, and it will be sent and caucht automatically without any further

manual labor," Mendes says. The need for burnan intervention will so way down, and so will errors - no more tages deteriorating from age, no more erabbing the wrong tane Error-checking software and other techniques can preserve the integrity of every bit. just as with any data storage, Monder roor

Change at the Stations Local stations, used to getting

pushed content only, will be able to real programming over the network by clicking on items in meous. They will he shie to use a Web browser to preview programs and. through a thin client, build daily and weekly schedules remotely on a server at PBS. At the right time, software at PRS will package the entire schedule and send it to a server at the station by satellite over IP. all with no manual effort at

aither and

"Labor savines will be pretty enhatential " says Ron Kain chief technology officer at WITE in Harrisburg, Pa. "And if you don't have to devote so many resources to particular technical functions, you can repurpose those resources to produce more local content.

where the real value is." PBS has several stations tryine out these concepts now. and it hones to have the initial stations in production by July 2004. "We are transforming the broadcast world into an IP world," Mendes says. "Our complicated delivery environ ment comes down to a sumply chain management problem, with just-in-time inventory and all the things we have been hearing for years from

"Because of advances in IT. PBS can really begin to adopt these supply chain pris ciples," says Jim Wollack, a senior manager at Accenture Ltd. "Many industries will adopt these standards-based platforms and begin to do simi-

"These concepts will probably be widely adopted worldwide because the savines and quality improvements are so compelling," Mendes says. 9

Public Television's New Supply Chain TV programs will flow from producers (manufactures) to PS





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Arrogance Undermines Best Antivirus Defense

Overconfidence and a series of missteps allow a virus through the corporate defenses. By Vince Tuesday

YE ALWAYS BEEN PROUD OF my security team's antivirus defense and scathing in my criticism of other companies that have had virus problems, believing as I did that any organization can eliminate virus problems by

using a simple, layered defense like ours.

We deploy antivirus software on our desktops, on our file, Web and e-mail

servers, and at the e-mail and Web gate-ways. We even use an outlourced e-mail scanning service. We use a range of vendors' products and

dors' produces and update signatures daily. I'm proud of that system. But then, pride goes before the full.

It started when the PC support team reported that a user said be was receiving a weird e-mail message. An antivirus software pop-up had been reporting a virus on the user's machine since Thursday. Now it was Monday, and be was just it was Monday, and be was just

calling it in.

This wasn't good. We have centralized desktop virus reporting, so we should have known about the problem right away and informed the user, not the other way around. What work around?

around. What went wrong?
The central antivirus server had been decommissioned for an upgrade from Windows XV 4 to Windows 2000, but the new build had problems and now no central server was one on control server was online. Instead of getting the new server working and then turning off the old one, someone decided it would be quicker to just rebuild the old one. With decora server and one. With decora server and any With decora server and and with the control of the c

gateway protection, this person presumed we'd be OK without the server for a few days. Then those few days

without the server for a few days. Then those few days stretched into weeks. Stupidly, I'd taken the complete lack of alerts from this server to mean that there were no problems to report, when in fact it indicated a failure in

our reporting infrastructure.
We managed to track the infraction to a new user whose machine doft have antivirus software. This flies in the face of our antivirus policy. How could it have happened?

The support group's process for new builds is to install Windows and the applications and then push the antivirus configuration from the central antivirus server — which was down for rebuilding.

Not only did we not have central reporting, but also we had no protection on new machines noticed our during the two weeks the machine was down. What caused me to miss thi? It a word compla-

cency, We hadn't had a virus outbreak for two years, and we just about software de

inprotected and fected desktops

infected desistops kept reinfecting files that we had scanned and cleaned. It was like bailing water from the Titanic

Fortunately, the previously deployed client software was configured to download updates from the Internet as well

dates from the Internet as w as the central server, so at least the older desktop machines were up to date with antivirus signatures.

More Trouble

But is gets worse. This user also managed to infect an unauthorized file server in the development group. Luckily the virus was weak, only affecting, exe files and spreading by way of shared files. We attempted to purpe the virus from that server, but our

virus from that server, but our antivirus software kept crashing before we could finish scanning the machine. Meanwhile, unprotected and infected desktops kept reinfecting filtes that we had scanned and cleaned. It was like bailing water from the Titunic. So I disabled the network card on the file server to give us some file server to give us some

time to solve the problem. My team downloaded a more recent, compatible version of the antivirus software and installed it on the server. The scan then worked properly and we re-enabled the file

By now it was the middle of the night. Dut everything was just about back to normal. A software distribution job was rolling out the client software to all recently built PCs, and rebuilding the central antivirus server was a top priority. But I received my biggest

rebuilding the central antivirus server was a top priorit But I received my biggest shock a few days later, after a few late nights cleaning up and making sure everything was properly in place. A PC helb desk staffer sub-

A PC help desk staffer subscribes to Sophos PLC's antivirus e-newsletter and forwards it each week to everyone involved in antivirus efforts. This week, when I

opened the newsletter, I saw my company's name in the top story: "[My company's name] hit by .exe-infecting virus."

My world went into pinsharp focus, and I could feel time folow as I came to a stark realization. This was the end of my career. My company would excuse a minor virus incident, but if the press got wind of it, I would be hung out to dry, How could the news have gisten out? Why would Sophon publish such a story? We certainly wouldn't be buying their products again. I funct and I'll make is more li-

goal to ruin their life as they had ruined mine. But when I started searching for the story on the Sophos Web site to get more details, I came up empty. Then it hir me. I called the PC help desk staffer and politely asked if he bad edited the newsletter before forwarding it. "Oh yes,

if he had edited the newsletter before forwarding it. "Oh yes, I'm glad someone actually reads it. I added that myself, since it was the hig antivirus news for us." That added insult to injury.

I hat added insult to injury.

Not only had I stopped paying attention to the fundamentals of my job, allowing a virus to slip in, but I'd also fallen for what I should have realized was an obviously phony

e-mail message.

I've learned a valuable lesson about always checking that the basics are working properly. I just hope that I've suffered enough that the gods leave me alone — at least for a work or two. 8

WHAT DO YOU THINK?

security resnager. "Who Exercing," whose name and employer have been disquared for obvious reasons. Contact him at vince haveday/thu/mail.com. or join the discussion in our fourst. Quietel just a \$550. To find a complete archive of our Security Memory's Journals, so online to Security Memory S SECURITY LOG

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SMC Rolls Out 802.11 Hardware

MC Networks Inc. last week arand EliteCoreact products connectivity standards. Available in August, the ElteConnect Uni-versal 2.4/5-OHz Wireless Acces int will start at \$400.90, and the EllisConnect Universal 2.4/ 5-Otto Wreless Conflict Adapt

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availability of its second-pe Bariel ATA RAID cons. the Escalado 85 ins. The Fecularie sec

Rrightmail Unveils Anti-Spam 5.0

all Inc. unvalled Bri nell Anti-Spam 5.0 with Bright-in 2 and URL rules, The new or 40 users and \$14 per user for DO poets, it will also be an

Another Front in The Standards Wars

T'S TIME for yet another standards rant. This time. I have in my sights a far more subtle villain than programs that refuse to run properly if you're not running the right version of Windows. It's more subtle than the nightmare of reaching vet another Web site that refuses to work unless you're using Microsoft Internet Explorer, I'm talking about the CPU in your computer, where all the real computing action takes place.

You're probably unaware that you have a CPU com-

natibility problem because in most cases, nothing ever crashes or fails to run properly due to a lark of CPU standards. The comnatibility issue rears its head in terms of performance: what you may fail to notice is that your programs don't perform as well as they could.

But you would notice if you did as I did a few mooths ago and started using a Linux flavor called Gentoo Linux, which you

can find at www.gentoo.org When you install a Windows application, it's precompiled and ready to run. Almost every software package available for Gentoo comes in the form of source code, not a precompiled executable file. Gentoo users build usable applications from the source code.

If the application is a large one, such as the OpenOffice productivity suite. this takes a lot of time. It might take a day or two before the application is installed and running. Power users often think it's worth the wait, because the completed application is usually faster and sometimes more stable. You end up with faster software because you can customize the Gentoo packaging

system to compile your anplications using the optimization settines of your chains

My workstatioo is based on the Athlon XP processor, so I've customized my Gentoo settings to install all software by building it with various AMD Athloo XP optimizations, in addition to other, more peneric twenks that apply to most other processors.

The result is a doubleedged sword. On one hand, all my applications run faster and more smoothly. Oo the other hand, all the software I've installed on my system will work only on computers with an Athloo XP processor. The reason is simple. The compiler sees my optimization settings and generates ma chine instructions designed specifical-

ly for the Athlon XP processors. If I copy the compiled versions of the programs to an Intel Pentium 4 system, the programs won't run. A Pentium 4 is designed in such a way that it doesn't understand some of the

instructions for an Athlon XP. Chances are extremely good that you don't have to worry about such things. If you're a typical user, it's likely that all the software on your system has been compiled to run oo any x86compatible processor. This is true for most power users and even most programmers. Most of your software is compiled to run equally well on a 486. Pentium, Pentium II. Pentium III. Pentium 4, K6, Athlon, Athlon XP, Athlon MP or any of several other alternative v86-compatible systems

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But in the interest of accuracy. I must point out that there are exceptions, which brings me to my point. A graphics card driver may detect the presence of an AMD processor and use its special 3DNow instructions. But in general, some of the best features of every system are going to waste

It really is an old story. The wasted power results from the fact that companies are motivated to differentiate and add value to their products in order to best their competitors. You can't solve the problem by eliminating competition

And although I desire more standards and conformity, I'm glad I can choose among different brands and models of processors. If AMD didn't exist, Pentium 4s

wouldn't be as powerful as they are. But you can create standards that ensure the players all compete according to the same rules. The other obvious solutions are too costly (a company could deliver multiple custom executables on every CD) or complex (the Gentoo self-compile approach).

The only practical (but unlikely) solution that comes to mind is an effective processor-standards group that companies such as AMD and Intel would respect and obey. What do you think?

WANT OUR OPPOS

MANAGEMENT



Don't Kid Yourself
IT projects fail largely because of

"delusional optimism," says Dan Lovallo in this mooth's Horvard Business Review, but IT managers can get a clearer picture of actual project risk. Page 42 CASE STUDY Thrift Thrives On Low Tech

By Kathleen Melymuka

Washington Federal is doing just fine financially — with a decidedly low-tech approach. Typewriters, yes, Voice mail, no. Page 40

Prince Dracle, PeopleSoft

Oracle's effort to take over PeopleSoft underscores the need for CIOs to protect their own interests in software contracts, saws columnist Bart Perkins, Page 44

VEN IN THE economic doldrums,
CIOs are planning for better
days. "We know we can't do it
now, but we can plan now so
when things get better we're
ready to go," says Tony Romete
ready to go," says Tony Romete
Inc. in Cypress, Calif. "If you wait for
things to see the test; it can take you a year to

pinn, and you're wasted a year.

The plans that CIOs are drawing up focus on wireless technologies, Web portals,
CRM, ERP, Infrastructure improvements,
skills upgrades and industry-specific business projects. Projects to upgrade security
and meet regulatory requirements, which
have gooe forward despite the ecocomy,
will continue to be high priorities as well

(see chart next page)

Better days may not be far off, says Barbara Gomolski, who tracks IT spending at Gariner Inc. "We're starting to see some signs of recovery," she says. "There's a lot of pent-up demand." She expects to see some growth in IT spending by early next year. Eveo when that happens, so one anticipates a return to the free-spending atmostates are term to the free-spending atmos-

phere of the 1990s. "I expect that if/when an increase in IT spending comes, it will be conservative," says Greg Tranter, CIO at Allmerica Financial Corp. in Worcester, Mass. "Our strategy is to exercise focused discipline around technology spending, regardless of market conditions."
"I'm afraid this is the way of life forever-

"I'm arrast ins it the way of the toevermore," agrees Dennis Klinger, vice president for information management it Florida Power & Light Co. (FP&L) in Juno Beach. "We're going to have to squeeze every orients."

Wish Lists

But that's not stopping the flow of ideas. Romero has used the downturn to complete an IT assessment and develop a four-year road map with "big steps and buby steps" depending on economic conditions. He'il begin with a suppliers portal for mantiers are using a single Web point of entry for fairtupida, a single Web point of entry for Mituabidati to collaborate with vendors. Then, bell tackle new financial systems as the first module in as ERP system for manufacturing. "How fairs we pod depends on the size



ClOs are using the economic full to figure out what investments they II make when the economy picks up.

of the recovery," he says. For example, the back end of the supply portal may he connected at once or in stones dopending on how funds are flowing.

*Portals are very hot." says Gomolski "Many big companies have acrumulated all these different Web sites. and they're not using the same language, and they're not integrated." she explains. "They're trying to get a single [contact] point."

Fran Dramis' wish list spotlights CRM and infrastructure "Unfront is customer care: customer acquisition. continuing to integrate our databases and products to bein in the sales cucle," says the CIO at BellSouth Corp. in Atlanta, "Also, we would accelerate the rollout of new IP capabilities - the support system that helps us to run new networks. That would be IA and IB" on his priority list, he says.

Dramis adds that the economi slowdown gave the business and IT time to step back and recalibrate. "The reflective phase gave the business a chance to reassess its priorities, and that wave us a chance to ordate the road map, so we have a whole set of plans about what we would attack," he explains As a result, he says, "when things loosen up the road map will flow even quicker."

Revamped Projects Tom Murphy is already implement

lumpstart.

his wish list. After the bottom fell out of the cruise business late in 2000, Royal Caribbean Cruises Ltd. in Miami mothballed a massive IT instistive called Leanfrog The billion-dollar plan included CRM, supply chain and human resources projects as well as enhancements to on-ship technology. Now, CIO Murphy is working on a more conservative version called

"Our industry had a speedy recov ery, and we retracked our original Project Leapfrog into Jumpstart and defined a new strategy to take a more fiscally prudent approach," he says. That approach targets the same year eral goals but breaks the execution into smaller, incremental chunks. It includes maintaining the current IT head count. supplemented by external resources such as San Diego-based outsourcer Science Applications International Corp., which Murphy has engaged to help with a Web site rebuild and the introduction of lava into the IT shop. He's also strictly prioritizing project work, enhancements and support.

Murphy has built an 18-month proj pipeline including the Web overhaul, ajor database and data warehousing



The reflective phase gave the business a chance to reassess its priorities, and that nave us a chance to undate the road man, so we have a whole set of nlans about what we would attack

FRAN DRAWIS, CIO. SELLSOUTH CORP. _____

_____ work and implementation of middleware for both ships and shore. "By implementing middleware, we're taking a component approach rather than the big-bong approach of Leapfroe," he

says. That way, "the company is in por tion to increase or decrease the spirot" depending on business conditions Middleware and integration are high priorities for CIOs. Gomolski savs. They're trying to take advantage of all the technology they have and get it all working together

Klinger's wish list at FP&L includes opgrading skills. "Right oow, we're rifle-shooting - doing just-in-time training -- and I would cortainly want to grow training" if the budget improves, he says. He'd also like to use mobile and wheless technologies to enable technicians and engineers any-

where in a plant to get or report vital Klinger is working with his business executives on a formal strategic plan for IT. "IT capital dollars compete

with plant and marketing dollars, so we try to make it clear what the IT investment opportunity is, and that gets halanced against the overall opportunities" he emplains

Securing Compliance

After a slowdown in 2002, the IT shop at Documentum Inc. in Pleasanton. Calif. is coine full steam this year, says CIO George Lin. One of his top priorities is harnessing IT to belo the company comply with the Sarbanes-Oxley Act a federal law that seeks to ensure the reliability of the financial statements of public companies. "This is the most urgent project all public companies have to work on," he says.

There's also a major renovation of the customer services Web site and major enhancements to the PeopleSoft Inc. FRP software, including a human resources module and financial upgrades. Lin says he has also been working oo security and wireless technologies and leveraging IT to integrate

sconient companies quickly One of the challenges for CIOs is

keeping business managers enthusia gets mean low visibility for IT. "That's very difficult." Romero says, He's kept the business interested by maintaining the most business-critical projects call center systems for dealers - while delivering other small but appreciated projects such as a system to consolidate divisional financial reporting and analysis. "Those are things we can do with the resources in hand," he explains, "We look for quick hits to mai

tain awareness that IT is still here. And on keen the infrastructure going." Allmerica's Tranter has used the hall to focus on in-house work such as implemeoting best practices in project management, service-level management, root-cause analysis, metrics, skills management and vendor management. "These initiatives got our

staff, and consequently our leadership, charged up," he save But as much as anything, the process of refining the IT wish list keeps the business engaged. "We've got pent-up

demand." Dramis says. "In a down cycle, you really have to prioritize proiects, and the business helps, so we get even more business engagement than wheo money flows more easily." Murphy agrees: "Now that we have the exect doing the IT priorities, helieve me, they are very engaged?

But although CIOs are easer to move ahead, some say the downturn has forced some needed introspection. "The IT spending slowdown is a gift

for CIOs," Lin says. "It helps us realize that sometimes the right thing to do is take a couple steps back and look at bie picture. In the boom days, he says, CIOs of-

ten lacked that perspective and the resuit was siloed projects with too little return on investment. The slowdown taught CIOs to figure out the enterprise way to work the business issues: to help the business in a cross-functional, holistic way, oot a siloed way," he says, "CIOs should use the slowdown to really build our input into the business. That will prepare us for the coming ramp-up."

Melymuka is a Computerworld contributing writer. Contact her at kmelymuka@yahoo.com.

RESCRIMARIONS TOOL To see how your IT spending sta

icks up against spend ses, vest our Web san QuickLink a3270



Open for Inspection

The New York City Department of Buildinasput its bulky old database of construction documents on the Web. where it's available anytime, anywhere, By Julia King



LONG LINES are a way of life most everywhere in Neur York, but not anymore at the New York City erment of Buildings.

Since January, architects, engineers and other professionals have been able to go online to get the code, occupancy and safety information they need in order to work on the 900,000 buildings under the city's jurisdiction, Before, they would have to queue up for hours at one of five borough offices outfitted

with errors-screen terminals linked to a 17-year-old proprietary mainframe system. The process could take hours and hold up building projects for days or even weeks

"At every step, from the beginning to the end of a project, we need to have constant access to city information. and the only way to get it was to make a trip to the borough office," says Edouard Paknia, an engineer in training at Advanced Professional Engi-

neering PC in Brookless Now Paknia and others can get the same data online in minutes, anytime day or night. Time is money, and that's

made a real difference," he says What's remarkable from an IT and a budgetary standpoint is how easy and relatively chean it was for the city to make users' lives so much easier, says Matti Friedman, the department's director of application development.

The Buildings Department used Software AG's Entire X. a set of XML integration tools to nut a software based "wrapper" around all of its Adahas data and programs written in Software AG's Natural programming language. This allowed mainframe data to be passed to the new lava-based Web system. "What the Entire X nackage does is take existing Natural code and repackage it in different formats." Friedman explains.

As for resources, it took two developers — a Java developer and an Entire X expert, both from the city's central Department of Information, Technology and Telecommunications - less than six months to come up with a proof-ofconcept Web site that recorded 10,800 hits on its first day last December, Today

the site is recording 135,000 hits daily. What's more, the Buildings Department's IT staff of experienced Natural developers can maintain the department's legacy programs, something that Friedman calls a "tremendous say ines. We didn't have to throw everything out and start from scratch. We could use existing business logic, plus

make a nice front end and put it all on the Web," be says. Another benefit Friedman

anticipates is an improvement in internal employee efficiency, thanks to a separate upgrade that will make the Adabas database SOL-compliant and thus available to other PC-based applications. This will make mainframe data directly available to em loyees, who now need to

have the IT staff translate it

into a format that they can

download into various reporting and spreadsheet programs

In the corporate arena, Web-enabling mainframe systems is neither new nor moket science. "The real novelty here is that this is a big municipal user," notes Uttam Narsu, an analyst at Gies Information Group Inc.

"At government agencies at the city, state and federal levels, there is so much silord information locked up in a variety of systems. But they don't have the luxury that his corporations have" to scrap systems and buy expensive new ones, Narsu says. "They are essentially stuck with what they've got, and they have to figure out ways to lever-

age that information." Priedman says the next step for the Web site is enabling users to file permit applications, plans and other documents with the department. This would require the ability to accept computer-aided design and graphics

files. The city would also need to establish a means of collecting filing fees electronically or processing credit card payments, which it's expected to do in the next few months, Friedman says. The Buildings Department is also studying long-term strate-

gies, such as using Adabas as a repository and integrating other third-party software applications, or repli ing the entire system with a commercial Web-based

In the meantime, Friedman says, "just being able to take a legacy system and with minimal effort put it on the

Thrift Thrives On Low Tech

Ultraefficient Washington Federal does just fine without the latest technologies.

TWOME OF THE WEST'S fastest-growing canings and leans, with 100 branches in wight states and \$2.4 billion in assets. Yet it wms no automated refler machines. It has no online braining. No voice mail. No 'press 3' automated phone system. Typewriters still sit ou desis or headquarters, and there are

only five Internet-connected PCs.

So, how does this business survive?

Superbly, says Washington Federal Savings and

Loan Association in Scattle, which last year reported record cornings of \$144 million, a 22% increase over fiscal 2001. At a time when critics are questioning the value of IT. Washington Federal seems to be proving those contrarians right: Less is more.

Washington Federal keeps its technology spending down to Po of its annual operating expenses and has a 1980s-style IT department of seven. "We sat: 'Don't spend a dollar when a dime will

do." says Roy M. Whirehead, president and CEO. Whitehead boots that Wishington Foleral his the best efficiency ratio in the thrift industry; 18%, compared with the industry average of 45%. That means that while other thrifts spend 45% cents to produce \$1 of net revenue. Washington Federal spends 18 cents tipical-ding the 1 cent for ITO to carn a back.

"We measure any travestment — whether in people, in brick and morrar, or technology — relative to the impact it will have on our efficiency ratio," says Whitehead.

'High-Touch' Service

One reason Washington Federal can spend so little on IT is that it has a simple, low-tech collection of services: passbook savings, certificates of deposit, money market accounts, interest-bearing checking accounts and fixed-rate hotne mortrares.

"We use technology when it allows us to deliver a higher level of customer service more profitably." Whitehead ays. "However, our customer base is one that is older and probably longing for high-touch levels of service that they can't get at other institutions, which seem focused on delivering product at the lowest per-unit transaction cost." So Washington Federal employees answer their own phones. And if they don't use typewaters, they use the WordPad applet that comes free with Microsoft Windows 98. The company's Web-site provides customer and investor information, with a single

e-mail contact for inquiries.

"The whole concept of not having a high-tech envaronment isn't particularly new, but it seems (Washngton Federal has) raised it to an art form," says Jerry Silva, an analyst at Needharn, Mass-based

in 1998 from high-tech Wells Fargo & Co.

"On the other hand, we have a very simple business, and the key to our profitability is our efficiency," he saws, "A simple business requires a simple

technology platform."

Sometimes, however, even Washington Federal has to upgrade its systems. Two years ago, the company decided that it needed to upgrade the teller hardware and software that's connected to its 20-year-old core banking system.



03/27/97	45.20	5,049,33
06/26/97	64.07	5,093,40
09/26/97	44.93	5,138,33
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Washington Federal

At Whatington Federal, where "high touch" is or important then high took, customers still get old festioned account record becks such as the co-

Why? Because it was no longer possible to find parts to repair the old teller PCs, which used the ancient Z80 chip and CP/M operating system. The last units Washington Federal had acquired were

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Homearown Cobol Rules

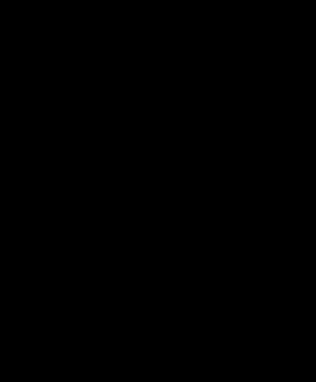
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average of Nova.

"Looking at those numbers causes me to wonder over the long haul how effective that technology will be in managing risk," says Whitehead. "Technology is a wonderful thing if it works. But if it doesn't work and it's widely applied in society or an industry, it can lead us all rith of fa elift." *

Winkler is a freelance writer in Seattle. She can be reached at winklerconnic@vahoo.com.



Thrift Thrives On Low Tech

Ultraefficient Washington Federal does just fine without the latest technologies. By Connie Winkler

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Homegrown Cobal Rules

Washington Federal didn't want to replace its core bashing system, though, so it was pleased to find that the Benchmark system was compatible with it, recalls Permenter. The banking system runs on a litelevelt-Pekard Co. finite-loterant NS sewers with homogrown code that was written in Cobol in the late PFOs. "Things like Java and XML get also to press, but most of the world's real business still happens in Cobol, and I suprect it will jake? I redire."

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Don't Kid Yourself

Reality bite summer for managers and do infuse more of it into project planning.



IT projects fail because managers kid themselves from the start about their chances of success. That's the message DAN LOVALLO and Daniel Kabneman deliver in the July issue of Harvard Business Review. When forcastine the outcome of

a risky project, they say, decision makers between exept up by a "delision of ception miss." Rather than entisonally weighing places out misses, they "pain accuration misses, they "pain accuration places out misses, they "pain accuration places out misses, they "pain accuration accurate in the Automation of misses belowed in the Automation of misses belowed in Management at the University of New South Wales. The Automation of Marther Meddymake how IT the darker can curb their enthusiasm and inject results into project processing.

What makes IT leaders everly optimistic about a project is chance of success? People's natural miclination is to be optimistic. One of the most ubfiquitious findings is asocial psychology is the above-average effect. When people are asked how they compare to peers in all kinds of areas, almost nobody thinks they're below the mean, which, of

course, is logically not possible.

What is "anchoring," and how might it lead to overoptimize in an If project? In an IT project, typically the initial plans are really realissic best-case scenarios. If you remain anchored to those, any adjustment away from that is unlikely to over far encount away from that is unlikely to

In today's sconomic environment, does the organizational pressure for ROI magnity the tendency to be overly optimistic? Optimism is prestly consistent, but the greater the organizational pressure, the more likely you are to get skewed forecasts. When an organization puts a lot of pressure on people to come up with some sort of very optimistic ROI number, they'll get the number be asset.

You say managers are also prove to the "filesion that they are incortive." Gos pue seplain? Managers don't see themselves as gambling or ratking risks. They're very proactive in trying to remove, all risk in the environment. Frequently they won't even acknowledge that a large degree of risk is still left. When a manager has a plan, he almost always overestimates his degree of control.

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Many IT project manager use remark planing to miligate risk, but had reflected, but had respect to the remark of the remark of the same of the remark of the remark of the remark of all the things that might go wrong. It's easy to think about how you could complete the plan, and that may even be the most likely occurate, but it still doesn't mean it's very likely. So many things can go wrong. Better to look us what's happened in the past with other IT projects as a guide to what's going.

to happen in the future.

And that's what you call the "outside view"?
When you take an outside view, you
look at a reference class of similar
propeets, both in your organization and
outside. Then you look at how much
they seent relative to their initial esti-

mates, how much time it took relative to what they initially thought. Then you ask. "How does our project differ from these?" You determine your place in that class. Out of that come forecasts that are likely to be more realistic.

How difficult is it to get this outside data? If you're an IT manager, it shouldn't be hard to get this information from inside your firm, and it also tells people what type of data they should be recording for the future. For outside

Reality Check

their Harvard Dustriass Reviewards in Louis and Daniel Kahnerman as project managers should company it proposed projects with sivilar or it have been done before. Here's his dect a reference class of projected and described (senting progress), bushard, time comparance. bushard, time com-

straints) that will help you asso your compreject's chances.

Document the extremes of the reference-class projects and plot them so a distribution, showing extremes, the median and any clusters.

rigitively predict where your project would full in the distribution.

seems the reliability of your pro-

Adjust year initial production, which was Many too optimistic. The less reliable year predictions have been in the past, the more you should data, consultants like [McKinsey & Co.] are good at helping firms get this. This is a place where there's room for firms to cooperate and there's a role for industry groups in trying to help them fourte out how not to waste money.

If I temper my overoptimism about my proposed project, won't I lose funding to a more optimistic competing project? It's difficult. The change has to come from the top of the organization. There has to be a policy and a process that asks people to back thins un based on facts.

If I do get funded, wouldn't the more negative outside view destroy my project team's ability to stay "my" and enthusiation? Here's where it's important to draw a distinction between decision and action. You want the outside view when you're making the decision; when you're taktive action let the outsides seen in

What if my team and our processes really are better than those it so entided Prices until You would have reasons to say why they are better, and those reasons stosally be based on objective predictions of success: the experience of the team, how well the organization has done in the past, how much money is behind it. If, based on this, you figure you're in the 99th percentile of the distribution, then you're got a reason to

say that

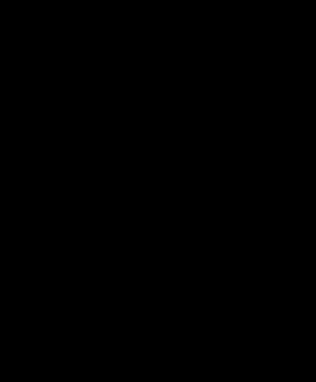
What if I'm planning a unique project or working with new technology that really has no track need? This has never happened. It's the first time for you, but it's nort the first time somebody tried to install a new IT system with a new technology, So your reference class includes projects with new technologies never used before.

What if my inside view is great and the outside view predicts failure? Do I trust the experience of outsides move than the projections of my colleagues? The outside view is an objective stantistical view. If that suggests that you're going to fail, but the inside-view forecasts suggest you'll succeed, it's time to take a step back and re-evaluate the project and possibly call it quits. The outside view is much, much more likely to be accurate

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Don't Kid Yourself

Reality bites, but IT managers need to infuse more of it into project planning.



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Lovallo, a senior lecturer at the Australian Graduate School of Management

Lovallo, a senior lecturer at the Australian Graduate School of Management at the University of New South Wales, told Kathleen Melymuka how IT leaders can curb their enhusiasm and inject realism into project forecasting.

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IBM

BRIEFS

Orbitz Appoints Hielm as CTO



at FedEx Corp. and his role d Zoho Corp., a start-up in is, Calif., offering an e-pro-

Survey Shows Web Services Kicking In

rior this year by Cutter Con on show that companies are

RADT PEDKINS

Oracle, PeopleSoft And You

F YOUR STRATEGIC SUPPLIER is the victim of a hostile takeover, who worries about your interests? Oracle's recent offer for PeopleSoft highlights industry consolidation issues. As part of the proposed takeover. Larry Ellison has threatened to stop supporting PeopleSoft applications, leaving PeopleSoft users adrift. PeopleSoft responded with a poison pill, offering to refund twice its license fee if it is acquired and the new

owner drops support for PeopleSoft synlications within two years [Quicklink 393431, Today, virtually every CIO is worried that a strategic supplier will be taken over and that support will slip.

What can be done? I conducted an informal survey of IT buyers. Many suregested escrowing source code as protection. With smaller software suppliers, contracts often give the buyer rights to the source code if the seller goes out of business or abandons the software. However, very few soft-

ware companies will actually allow the source code to be released in the event of a takeover. Even with intellectual property protection, doing so would significantly lower the company's value. With large software suppliers, escrow clauses are rare, and they don't do the buyer much good anyway. Few buyers can afford or have the skills to maintain the source code for applica-

tions the size of PeopleSoft's Buyers sometimes ask for contract clauses allowing them to terminate their contracts or receive refunds in the event of a takeover. In general, these provide minimal benefit. When you implement new software, you generally change your business processes. Even if you get your money back, you still have to go through the pain and expense of a second implementation, not to mention the time and effort remired to select, educate and build a relationship

with a new supplier. Unfortunately, it's too late for PeopleSoft users to start protecting themselves from the possible Oracle takeover. However, the episode emphasizes the importance of anticipating

similar situations. In future sourcing decisions, you can do the following: Streamine your architecture. Design the architecture with ease of substitution in mind - use standard interfaces and commodity products where possible. Conduct your due diligence thoroughly.

Part of your evaluation should focus on supplier viability and business strategy. Is the supplier's management team involved, committed and hungry? Is the company making money? Does it have enough cash to continue investing in the product if sales decline? Does its business strategy meet your goals? How will its future product line affect your architecture?

tract. Contractual agreements must be bonored, even in takeovers. Include explielt performance and service engraptees, covering things like response time. (One CIO purchased new software only to find that "nightly processine" took four days.) Demand product

support for a specified length of time. Il increase your breadth of knowledge. Industry futurist and Computerworld columnist Thornton May has studied CIO communications and concluded that CIOs "need to get out more." They spend less than 9% of their time talking to industry analysts, other CIOs, journalists and their company's customers. You must stay current. Read the trade press. Attend conferences. Talk to peers and customers

Consider busing Grouph an industry con serium. Buying groups can leverage aggregated demand and swing the balance of power away from the supplier Websteer for the supplier's advisory board. Even better, get your business executive sponsor to volunteer. If the software company is acquired, the acquirer will usually ask the advisory board

for help keeping existing customers. · Above all, develop solid contingency plans. Have a backup for every strategic supplier, no matter how solid it seems. Microsoft and IBM have enough spare cash to make any other vendor vulner-

able to an acquisition!

It's difficult to protect yourself in the middle of a takeover. The best you can do is to be proactive: Streamline your architecture, write a tight contract, and stay on top of industry trends. You can't prevent supplier takeovers, but you can minimize the effect on your IT organization.

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IT Careers: Look for Certification Training with Hands-On Component

professionals, ranging from those made available by companies such as SAP and Microsoft to those that widows some critical II need. The courses are designed to provide knowledge and to provide a new capability that can be applied back at work, immediately

in the past two years, as the IT profession has been harried about like a hart hadronton birdle enrollment in certification programs has dropped. However, certification nervorams are startion to see an arounce along with efforts. to make the training more valuable.

Among the trends: more hands-on, facilitated labs to out knowledge to work and more curriculum that holos mid-level managers and non-IT people increase their range of skills & third trend is that those's more blending between on-line instruction and instructor or mentor-led extraction in the project management and of skills.

bringing enrollees more value. Boland Van Liew, president of HOTT Olands On Technology Transfer) Inc., says enrollment for his hands-on focused training organization has doubled in the past year. "We know that certifications may help you get an interview, but they aren't going to help you get and keep a inh flely competence will do that " he says

Originally on-line courses and certification didn't include hands-on labs. "Td say 80% of the certification groups have changed to offer a program that shows

sands of certification courses are offered to IT participants how to use the program or application to solve a nonhiern " says Van Liew. "We want you to get more than a highlight of feetures. Yes, we want you to know a lot about IAVA syntax but more important is that unsurement to december a site that is usable."

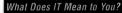


Thorseon NFTo in its two-year study of comprate learning, found that a blend of hands-on labs (known as crenarin-based everrises) with mentur and on-line learning with appropriate unit tests, produced the best society The secont Thomson's Job Impact Study The Next Generation of Corporate Learning, states that blended learning with the bands-on, facilitated labs impre-

accuracy by 30% and speed of skill acquisition by 41%. Van Lew says that certifications supporting open systems are among the most popular. "JAVA is burning hot right now." Van Lawy says, as is PHP. Other hot certifications are ASP, CGI, MCSC, MCSD and MCSE. There's been a major increase in security certification offerings, including a major uptick for the SANS (System Administrators, Audit. Network, Security) Institute, which now has 156,000 government and commercial participants, Security, however, remains a small portion of the overall IT population looking for training.

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Continued from page I IT Security

ry spending," said Mark Doll. the Americas director of New York-based Ernst & Young's Security Services division, in a prepared statement. "It looks like we need to find a credible alternative to conventional ROI anomaches in order to secure funds for the information security function."

High Priority

Not surprisingly, 90% of the organizations surveyed said that IT security is of high importance to them, with 78% dentifying risk reduction as the top factor influencing se-

curity spending Even en information security managers are having a hard time explaining the importance of IT security in relation to overall business needs, the survey showed "There's a clear disconnect between what organizations define as a major business objective protecting their information resources - and where they allocate funding," Doll said.

The survey's results, esperially those related to ROI areo't surprising, users said "Showing ROI on security is an interesting problem," said

mathan Souire, security tech-Leading Barriers

nical architect at Dow Jones & Co. in Princeton, N.I. *For the most part if we are doing our job well, you don't notice us. Security is not generally a profit center, so from a dollar perspective, it is very hard to justify spending.

Security and IT managers also lack the experience, training and vocabulary to effecrively articulate a business case for security funding, said Dennis Treece, director of corporate security at the Massachusetts Port Authority (Massnort) in Roston, As one

of the executives in charge of securing Boston's Logun International Airport, three seaports and a major toll bridge. Treece oversees both physical and IT security for Massnort. "IT people come from a cuil ture that sees security as just

another point of failure in their networks, another way to decrease network speed and performance," Treece said. "IT people who get made IT security people are too culturally attuned to the network's problems and don't press the case for security strongly enough." Compounding the problem is the fact that security metrics

in many ways are inherently hard to collect. Treece said. For instance, "how do you collect the number of events that

did not happen because your guards were awake?"

Rusiness Disconnect The fact that just 51% of those surveyed said their FT security

spending was either completely or closely aligned with busi-ness needs illustrates another problem. And more than 34% of organizations rated themselves as less than adequate in their ability to determine whether their systems are currently under attack while more than 33% said their ability to respond to incidents was

Doll said many executives focus on well-nublicized security issues such as viruses and alicious backers, when they

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JONATHAN SOURE, SECURITY TECHNICAL ARCHITECT DOWN IONES

should be looking into less obvices threats such as discress. tled employees, network links to nartners with untrustavethy systems, hardware thefts and nonsecure wireless access

by employees "These factors can not only cause serious information security damage, but also severely damage a company's regulation " he said The bulk of security spending at most companies contin-ues to be on technology produces with fer less strention being paid to employee awareness and training issues, the

survey revealed. Only 29% of those surveyed listed emoloyee awareness and reaining as a ton area of FT security exending But funding for any security project is especially hard to secure in a depressed economy, said Carl Cammarata. chief information security officer at automobile association AAA Michigan in Dearborn. "There is a continuing focus

to maintain baseline costs. If a

choice has to be made be-

pyren adding new business

was less expensive the con-

functionality or spending money on something that's less tangible, like security, the money always goes to adding husiness functionality " Cammarata said. The trick is to "express risk in tangible terms" by showing what a lack of security could do to a core The "2003 Frost & Young Global Information Security Survey" was conducted over a two-month period earlier this year, sleaning responses from

more than 1400 organizations in 66 countries. I FARM MARE AND INF

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Continued from page 1 Tru64

competitive officer, said he helieves that many of the Alpha and Trufst users will "feel abandoned* and dissatisfied with the option of ultimately moving to Itanium. Sun is focusing on growing

revenue, said Singer, and HP "just kind of left the door wide IBM is also keen to attract some of these users. The company doesn't have a specific incentive program unique to Alpha and Tru64 users, but it does have programs that would help them, such as server consolidation studies, said leff Benck, director of

product marketing at IBM's Systems Group One goal of the HP competitors will be to convince Alpha and Tru64 users that IBM's AIX version of Unix and Sun's Solaris are an easier transition

then HOLITY Dan Marmion, CIO at hardware maker New Era Cap Co. in Derby, N.Y., runs Alpha and Tru64 and said be looked at converting to Sun two years ago. Although the hardware

version costs were high Marmion said he would be willing to hear Sun's new pitch, although so far be's comfortable with HP's migration strategy to move Tru64 users to HP-UX, even though be may lose some features. Some of the consultants Best Western brought in to evaluate

its notions were from IRM, and they said the company wouldo't have any problems moving its Oracle applications to any platform, including IBM. Skuare said be liked the IBM oSeries servers, but "HP was able to bring together the best overall deal for us." That package provided professional services and ongoing mainte-

nance and still met the hotel's Do I think this 7 is a great time to immn to the other platforms? I wouldn't say so yet. I don't foresee Itanium as

an also-ran platform. JIM BECKER, LEAD SYSTEMS PRODUCED INDIAN INSTITUTE

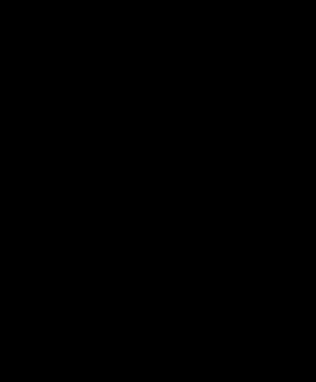
headers made he said Skuare said be is seeing a lot of interest from wendors in customers like himself "If there isn't already a battle out there to was those people. there should be " be said.

lim Becker, a board member of the Chicago-based HP user group Encompass and lead systems engineer at Washing ton think tank the Urban Institute and an Alpha and Open-WMC upper said he mad no seasoo yet to get off that platform.

"Do I think this is a great time to jump to the other platforms? I wouldn't say so yet." he said "I don't foresee Itanium as an also-can platform." HP is planning Alpha upgrades through 2005. It also has plans for two more releases of Tru64 and will support it

through 2011 In response to Sun's pro-gram, HP officials said the battle for customers cuts two ways. The company has comprehensive and coordinated companywide programs "to aggressively pursue and migrate customers from Sun and IBM systems to HP systems," said Mark Hudson, HP's vice

president of marketing for enterprise storage and servers.



Continued from nove I IT Security

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High Priority

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Even so, information securiry managers are having a hard time evolutions the importance of IT security in relation to overall business needs, the survey showed. "There's a clear disconnect between what organizations define as a major business objective protecting their information resources - and where they allocate funding," Doll said. The survey's results, especially those related to ROI aren't surprising, users said. "Showing ROI on security is an interesting problem," said Ionathan Squire, security tech-

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FRANK HAYES . FRANKLY SPEAKING

The Idea Game

OW SLOW is the business-news business these days? Is So slow that The Wall Street Journal's online edition? Is working on a story about companies that have developed grammar policies for e-mail. That's right: At a time when you'd expect everyone to be laser-focused on keeping costs down and maximizing productivity, some executives are fretting about whether the verbs are conjugated correctly in employees' e-mail — and the Journal wants to write about them.

Finished laughing? Good. Now what are you going to do when your CEO decides he wants to implement an e-grammar policy, too?

Sure, it sounds a little silly. But hey, times are tough. Every company needs any edge it can get. And if a grammatically correct e-mail message impresses a prospect just enough to tip the competitive scales in your company's favor, it must be more than to the competitive scales and the second process to th

And why would your CEO come to IT about this? Because it's a lot cheaper and easier to bolt a grammar checker onto your e-mail system than to send every employee to remedial grammar classes. At least that's what your CEO

is going to think.
Your CBO is also going to think that you can
come up with some cost-effective ways to do it.
And that you can make it happen fast. And that
the result will improve even his messages.
So, what should you do? That deepends — but

don't just treat this idea like one of those inflight inspirations. You remember them. Back when you still had a full staff and budget, your CEO used to return from basiness trips with loopy IT ideas that came from airline in-flight magazines. Usually they sounded very interesting — but were com-

pletely impractical or inappropriate for what your company was doing with IT. And usually you could either talk him out of it or just let the idea die from lack of action. In-flight inspiration tended to have a pretry short

ittle span. As time went by, you got less of that. Maybe you didn't notice, but somewhere during the Internet frenzy, your CEO got a little more tech-literate, so those loopy in-flight ideas stopped sounding so good. And isometime after the comonly started sinking, the idea of burning budget dollars based on something torn from a givenway airline magazine stopped sceming so smart.
So why would your CEO start bringing in ideas again? First: They won't be coming from airline magazines. They'll come from business newspapers and magazines. These are sources your CEO trasts for business information. He'll

trust their IT suggestions, too

Second: Your CEO may now believe he can't afford not to be involved in IT. Sarbanes-Oxley and security and lots of other bot-button business issues depend on IT today. But so do little tweaks that could give your company that tiny bit of competitive edge. He doesn't want to

miss those opportunities.

And you shouldn't miss those opportunities either. Don't dismiss your CEO's new suggestions like so many in-flight inspirations. He believes IT matters. Leverage that helief

And even if an idea sounds a little silly to you, remember that those silly little ideas can pay off big for you. This is a chance to make your IT department look smart, responsive and business-savey in front of the guy who can decide either to invest in your shop or outstource a bie chunk of it.

So stop laughing. Take it seriously. It might be a good idea. But even if the business doesn't get any real advantage from it, that's no reason you shouldn't. P members within any own company, "this issue," in the cold another forthfollow until the first including any of the same shorten for the company of the same service. But it instead of participality has a commoditive, the observable of the same of the commoditive that is the same of the commodities and the same of the

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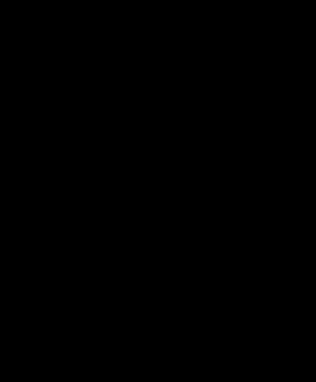
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And you shouldn't miss those opportunities either. Don't dismiss your CEO's new suggestions like so many in-flight inspirations. He believes IT matters. Leverage that belief. Get back to him fast with real analysis and real options. Don't encourage bad ideas, but madge not-so-bad ideas in the right direction.

Warn him of what they would cost in budget and delays to other projects — which, not incidentally, will give those projects high-level visibility. Point out the limits of the technology and demonstrate that you value the burnan element in business.

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